

**CONVENTION ON
BIOLOGICAL
DIVERSITY**Distr.
GENERALUNEP/CBD/WG-RI/2/INF/1/Add.2
11 May 2007

ORIGINAL: ENGLISH

**AD HOC OPEN-ENDED WORKING GROUP ON
REVIEW OF IMPLEMENTATION OF THE
CONVENTION**Second meeting
UNESCO, Paris, 9-13 July 2007**UPDATED SYNTHESIS OF INFORMATION CONTAINED IN THIRD NATIONAL REPORT***Implementation of the Articles and Provisions of the Convention**Note by the Executive Secretary***INTRODUCTION**

1. This addendum covers a synthesis of information from third national reports concerning the implementation of various articles and provisions of the Convention, including some cross-cutting issues adopted under the Convention. It should be noted that not all articles and provisions of the Convention have been covered. Only those covered in the third national report, except for Article 19*, are covered here.

*Implementation of the Global Initiative on Taxonomy**Introduction*

2. The Conference of the Parties, in its decision IV/1, adopted the Global Taxonomy Initiative (GTI) and the programme of work for the GTI was adopted in decision VI/8. The programme of work was reviewed and amended in decision VIII/3. There are five operational objectives in the GTI programme of work, including needs and capacity assessment, building infrastructure and human resources for taxonomic collections, facilitating system for access to taxonomic information and providing taxonomic support for the implementation of thematic work programmes and cross-cutting issues.

3. In the third national report, Parties were asked to report on the implementation of the above-mentioned operational objectives of the programme of work for the GTI. It should be noted that, considering some questions in the third national report have been covered in the report on

* Article 19 is not covered due to the fact that relevant information has been covered in the national report submitted to the Cartagena Protocol on Biosafety.

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implementation of the programme of work for the GTI, which was requested from Parties before the third national report, so some information from these reports is also used to prepare this synthesis.

Synthesis of responses and comments

Development of a plan to implement the suggested actions as annexed to decision IV/1

4. Many Parties (58%) have not yet developed a plan and some Parties (28%) are developing such a plan. Only a few Parties (10%) have a plan in place and even fewer Parties (4%) have reports available on the implementation of such a plan. Among all groups of countries, relatively more industrialized Parties than other groups of countries have put in place or implemented such a plan, however, no Parties with economies in transition have developed or implemented such a plan.

5. Despite no formal plan in place, some countries have undertaken some taxonomic activities at various levels. For example, Sweden and the Netherlands have a long tradition of undertaking taxonomic work on a global scale though they have not yet developed a formal plan. Some Parties (16%) have conducted taxonomic needs assessments and a number of Parties (12%) mentioned regional or international cooperation in this field. A few Parties noted training taxonomists and the provision of funding for some taxonomic activities.

6. Australia is one of the few Parties with a plan that is implemented. Australia has undertaken extensive state and national collections, training programmes and funding. There are high-quality virtual collections and taxonomic information online and strong collaboration between jurisdictions, universities, taxonomy professionals and with developing countries.

Long-term investment in the development of appropriate infrastructure for national taxonomic collections

7. Many Parties (64%) have invested on a long-term basis in infrastructure development of national taxonomic collections while some Parties (36%) have not. In comments provided, many Parties (54%) listed important collections and a few Parties (12%) noted development of online databases and virtual collections. Some Parties (29%) specified funding arrangements for taxonomic infrastructure, most of which were from government budgets. Some Parties (22%) described programs/projects for infrastructure development. A number of Parties (16%) noted that the funds were too limited for the necessary capacity-building. A few Parties mentioned national and international collaborations in development of infrastructure.

8. Main obstacles to implementation of this programme of work include lack of funds for development of infrastructure and lack of trained personnel.

Training programmes in taxonomy for increasing capacity of taxonomic research

9. Many Parties (68%) reported that they had provided training programmes in taxonomy while some Parties (28%) had not developed training programmes in this regard. Many Parties (60%) report taxonomic training programmes or activities in academic or educational institutions. Relatively industrialized countries and developing countries in the Asia-Pacific region provide more training programmes in taxonomy.

10. Some Parties (24%) cited regional or local cooperation for training taxonomists. Some Parties (20%) noted training at research institutes and collection facilities. A few Parties mentioned the contribution of local NGOs to training taxonomists. A few Parties noted funding bodies providing resources for training taxonomists. China reports that it gives special attention to taxonomy education in

universities. In addition, China also provides information on taxonomy and organizes educational events for the general public on taxonomy in order to popularise knowledge about its biodiversity.

Steps to ensure financial and administrative stability for institutions responsible for biological diversity inventories and taxonomic activities

11. Many Parties (44%) indicate that steps have been taken to ensure financial and administrative stability of some of their taxonomic institutions. A number of Parties (10%) report that all major institutions are financially and administratively stable. Some Parties (27%) state that they could not ensure financial and administrative stability of institutions responsible for taxonomic activities. Some Parties (18%) report that steps were being considered towards this direction though financial and administrative stability of these taxonomic institutions cannot be guaranteed at this stage.

Collaboration with existing regional, subregional and global initiatives, partnerships and institutions in carrying out the programme of work

12. Many Parties (43%) have undertaken some regional and global collaboration activities in implementing the programme of work. Some Parties (30%) indicate that such collaborative programmes are under development. 26% of reporting countries have not yet undertaken any collaborative activities in this field. Relatively industrialized countries and countries with economies in transition have undertaken more collaboration activities in the field of taxonomy.

13. On specific collaborative activities, some Parties (18%) mentioned that needs assessments were conducted as part of their regional collaboration programmes. Half of responding Parties listed specific projects/programmes in collaboration with other countries, with details provided on associated taxonomic groups. A few Parties mentioned regional or global GTI workshops as part of their collaborative initiatives.

14. Several European countries reported regional taxonomic needs assessments and capacity-building workshops such as: 'Current state and possible future actions' submitted by the European Platform for Biodiversity Research Strategy (EPBRS) to the European Commission (2003); 'Building Capacity for the Global Taxonomy Initiative (GTI) in a larger Europe' (2004). Some Parties mentioned BioNET and work via local partnerships (LOOPS), which are regional initiatives (e.g. NAFRINET and ASEANET). BioNET is an international not-for-profit organization which promotes taxonomy for biodiversity-rich but economically poorer countries (<http://www.bionet-intl.org>). A few Parties noted SABONET as part of regional initiatives, which is a GEF-funded project focusing on plant taxonomy and conservation in southern Africa and provides workshops, courses and funding for the countries involved.

National assessment of taxonomic needs and capacities

15. Half of responding Parties have conducted a basic assessment and a few Parties (7%) completed thorough assessments. Many Parties (43%) have not carried out national taxonomic needs assessments. Many of these countries with no needs assessments undertaken are countries with economies in transition. Relatively industrialized and developing countries from all the regions have undertaken some assessments, most of which were basic. Notably some countries from the GRULAC and the Asia-Pacific region have made thorough assessments.

16. Many Parties (40%) commented on the extent and type of taxonomic needs assessments, including challenges encountered in making assessments. On specific challenges, some Parties (19%) mentioned a shortage of qualified staff and indicated that more taxonomic training was needed for taxonomic capacity-building. Some Parties (17%) noted a need for increased taxonomic information dissemination and public awareness. A few Parties mentioned the need for increasing funding, institutional capacities, research on less studied taxa, national coordination and international cooperation.

Regional or global capacity-building to support access to, and generation of, taxonomic information in collaboration with other Parties

17. Some Parties (20%) reported that global and regional capacity-building is under development to support access to and generation of taxonomic information. Some Parties (36%) stated some activities were underway and a few Parties reported that many activities were carried out towards this goal. Some Parties (38%) stated that they had not yet started working on this at either global or regional level. The majority of the global/regional capacity-building activities in this regard have been carried out by industrialized countries. However, few Parties with economies in transition have undertaken related activities.

18. Many countries provided detailed information on activities in this regard. A few Parties (10%) mentioned active participation with GBIF. Some Parties (18%) listed web-based taxonomic databases or specimen digitisation projects. Some Parties (18%) mentioned infrastructure-building projects involving collection facilities. Some Parties (20%) described specific collaborative programmes or research projects. A few Parties mentioned specific funding bodies for taxonomic information access and generation and collaborative human-capacity-building projects. A few Parties mentioned GTI capacity-building regional workshops and noted involvement in relevant international/regional networks or scientific societies.

19. The European Community reported on many global and regional activities undertaken with other countries, particularly developing countries. There are many taxonomic projects related to implementation of the GTI funded through the EC Development Aid programmes as well as through the Research and Technological Development Framework Programmes.

Taxonomic support for the implementation of the thematic programmes of work under the Convention

20. Many Parties (43%) have not yet provided taxonomic support for the implementation of the thematic work programmes of the Convention. The percentages of Parties that have provided taxonomic support for projects/research activities to implement different thematic work programmes are the following:

- 43% for forest biodiversity;
- 36% for marine and coastal biodiversity;
- 30% for dry and sub-humid lands biodiversity;
- 39% for inland waters biodiversity;
- 36% for biodiversity of mountain ecosystems;
- 37% of Parties for agricultural biodiversity;
- 13% of Parties for island biodiversity.

21. A few Parties (6%) have provided taxonomic support for all the thematic work programmes (Belgium, Cuba, El Salvador, India, Mexico and the United Kingdom) and 10 % of Parties have supported six thematic work programmes. However, half of responding Parties have provided taxonomic support for only one thematic work programme. Comments vary greatly between Parties, ranging from short, general comments and detailed descriptions of research activities on a specific taxonomic group or thematic work programmes.

Taxonomic support for the implementation of the cross-cutting issues under the Convention

22. Many Parties (61%) have not developed taxonomic support for the implementation of the cross-cutting issues of the Convention. The percentages of Parties that have provided taxonomic support for projects/research activities to implement some cross-cutting issues are the following:

- 18% for access and benefit-sharing;
- 18% for the Ecosystem Approach;
- 18% for Article 8(j) and related provisions;
- 25% for impact assessment;
- 29% of Parties for invasive alien species;
- 4% of Parties for other issues.

23. A few Parties have provided taxonomic support for all the cross-cutting issues listed (Cuba, Australia, Benin, Egypt, India, Kenya, Thailand, Uzbekistan and Zimbabwe). However, many Parties (66%) have provided taxonomic support for only one of the cross-cutting issues. The WEOG countries have provided high taxonomic support for issues dealing with invasive alien species. The WEOG also led among all regions in providing taxonomic support to address all the cross-cutting issues, with the exception of Article 8j and access and benefit-sharing.

Overall Assessment of Progress and Challenges

24. Areas where 50% of Parties or more reported some progress is being made include: long-term investment for infrastructure for taxonomic collections; training programmes in taxonomy and capacity of taxonomic research; basic national taxonomic needs assessments; and support for thematic programmes of work.

25. Areas where 35-50% of Parties reported some progress is being made include: financial and administrative stability of taxonomic institutions; regional or global capacity-building to support access to, and generation of, taxonomic information; and collaboration with existing regional, subregional and global initiatives, partnerships and institutions to carry out the programme of work.

26. Areas where over 50% of Parties reported progress is lacking include: developing a plan to implement the suggested actions as annexed to decision IV/1; and support for the implementation of the cross-cutting issues under the Convention.

27. In addition to some specific challenges mentioned above, the main obstacles identified by many countries for the implementation of the programme of work for the GTI are primarily insufficiency of funding, lack of/poor infrastructure, and lack of training and trained personnel.

General Measures for Conservation and Sustainable Use (Article 6)

Introduction

28. Article 6 of the Convention requires Parties to develop or adapt national strategies, plans or programmes for achieving the objectives of the Convention and to integrate biodiversity conservation and sustainable use into relevant sectoral or cross-sectoral plans, programmes and plans.

29. So far, the Conference of the Parties has not provided comprehensive guidance on the implementation of Article 6 in one consolidated decision. Its relevant guidance is scattered in various decisions, in particular those relating to the thematic programmes of work and cross-cutting issues. In these decisions, Parties were requested to incorporate thematic areas and cross-cutting issues into national biodiversity strategies and national plans or relevant sectoral and cross-sectoral strategies, plans or programmes. Goal 3 of the Strategic Plan of the Convention states that “national biodiversity strategies and action plans and the integration of biodiversity concerns into relevant sectors serve as an effective framework for the implementation of the objectives of the Convention”.

30. In the third national report, Parties were asked to report on the status of NBSAPs, targets included in NBSAPs, identification of priority actions for implementing NBSAPs, sectoral or cross-sectoral integration of biodiversity considerations.

Synthesis of responses and comments

31. *Status of NBSAPs.* Many Parties (60%) have put in place some strategies, plans and programmes for achieving the objectives of the Convention. Some (26%) have developed comprehensive strategies, plans and programmes for this purpose. Ten countries indicated that their biodiversity strategies or action plans were under development. A few others said that no such strategies or action plans are in place. It should be noted that some countries do not name their biodiversity strategies or action plans as such. Instead they may have incorporated biodiversity into their related strategies and plans, such as sustainable development strategies or national environmental policy or plan, or have developed a series of related strategies or plans that in combination serve the same purposes as do NBSAPs.

32. *Setting measurable targets within NBSAPs.* Some countries (40%) reported that they had included some targets in their NBSAPs, with a few countries indicating that reports on implementation of these targets are available. However, the detailed comments provided by these Parties do not seem to support these answers. Many countries (41%) indicated that progress on target development is at various stages of advancement. Some countries (15%) have clearly said that no such targets are in place.

33. From the detailed comments provided by Parties, targets set by many Parties in their NBSAPs or other related strategies are mostly qualitative. Only a few Parties have adopted quantitative ones. For example, Poland, as revealed in its National Policy on Forest, aims to increase forest cover to 30% by 2020 and to 33% by 2050. Malaysia aims to achieve a level 50% of tree and forest cover in perpetuity.

34. *Identification of priorities for implementing NBSAPs.* Most Parties (82%) that had developed and/or adopted their NBSAPs have identified priority actions or activities for implementation. The rest indicated that they are identifying or are yet to identify priorities.

35. *Sectoral or cross-sectoral integration of biodiversity concerns.* More than half of reporting countries indicated that they had integrated biodiversity issues into some sectors. 36% of reporting countries said that biodiversity issues have been mainstreamed into major sectors. Three countries reported that this integration had been achieved in all sectors. Ten countries stated that mainstreaming had not occurred yet. While listing sectors where biodiversity is already integrated, a considerable number of countries highlighted the fact that complete integration takes time and that much work remains to be done to this end.

36. From the detailed comments provided by reporting countries, it seems that there are a number of ways to mainstream biodiversity. First, obviously, many countries have developed sectoral strategies, plans and programmes to achieve the objectives of the Convention. The sectors mentioned by Parties are many (almost all the sectors that can impact biodiversity). Primary ones are forestry, agriculture, fishery, mining, tourism, industry, education, energy, water management (including wetland management), land use management, and rural or local community development. Meanwhile a number of countries reported on some sectoral initiatives and programmes developed to address biodiversity issues in these sectors. For example, in South Africa, the Biodiversity and Wine Initiative is a partnership that exists between the wine industry and the conservation sector in the fynbos areas of the Western Cape.

37. Second, a considerable number of countries stressed the cross-sectoral approaches to address biodiversity issues. Therefore many of them have incorporated biodiversity issues into some broad or long-term development and/or environmental strategies and plans, such as national strategies for sustainable development, national long-term plan for social and economic development, national

strategies for natural resources management, national environmental strategies or plans and poverty reduction strategies or papers. For example, in 2003, the Australian government refocused policies on biodiversity conservation by adopting a strategic cross-sectoral approach as the basis for investment in biodiversity maintenance and recovery. Botswana's Vision 2016 calls for a fully integrated approach towards conservation and development, with equitable distribution of environmental assets and natural resources and their benefits.

38. Third, some countries mainstreamed biodiversity into relevant sectors through having developed and adopted legislation, such as Biodiversity Act, Water Resources Management Act, the Conservation of Agricultural Resources Act and Fishery Act. The three objectives of the Convention are included in these laws and regulations as key objectives and guiding principles for relevant provisions. A number of countries indicated that biodiversity integration is achieved through including biodiversity-inclusive requirements in environmental or strategic environmental impact assessments. All projects or programmes that impact biodiversity, irrespective of sector, must meet the requirements of EIAs or SEAs.

39. Fourth, some countries have integrated biodiversity as a key component of their programmes to address other related issues such as land degradation and climate change. A few countries have developed action plans to address climate change and its impact on biodiversity. In national action programmes to combat desertification, some countries have included biodiversity conservation and sustainable use as key actions to fight desertification. Some countries also address biodiversity issues while developing and implementing policies or programmes for biotechnology, local and indigenous community development, benefit-sharing related to the use of genetic resources, scientific research and environmental pollution abatement.

40. Finally, some countries have not only integrated biodiversity issues into relevant sectoral and cross-sectoral strategies, plans and programmes, but also established various mechanisms and institutional frameworks to make integration happen. For example, Thailand has established a National Committee for Sustainable Development, which is chaired by the Prime Minister. The main principle of sustainable development identified by this committee is the integration of nature conservation with actions undertaken in other relevant sectors, including poverty reduction and local community development.

41. Biodiversity is also mainstreamed into some regional strategies and policy frameworks. For example, the EU Strategy for Sustainable Development included one key priority which is managing natural resources more responsibly. In addition, the EU had promulgated a number of directives, such as the EU Water Framework Directive and the EU Habitat Directive, which cover principles of sustainable development and integrated management approaches.

Overall assessment of achievements and challenges

42. It appears that many reporting countries have recognized the importance of biodiversity planning as a general measure for achieving the objectives of the Convention. This is revealed by the fact that many countries have put in place national biodiversity strategies and action plans or similar strategies and plans. More importantly, biodiversity has been mainstreamed by many Parties into relevant sectoral plans. However, goals, objectives and targets included in NBSAPs or other similar strategies are mostly qualitative. Only a few countries have set clear, quantitative targets, most of which are related to forest cover and protected areas coverage. Though most countries have identified priorities for implementation of their NBSAPs, few of them have indicated whether and to what extent they have been implemented.

43. There are a few common challenges encountered by many countries, in particular developing countries and countries with economies in transition, which are lack of human, technical and financial resources, lack of adequate data and information and weak policy, legal and institutional support. Other

challenges include lack of coordination among relevant sectors and levels of government, limited stakeholder involvement, lack of education and awareness, weak law enforcement, lack of incentive measures, lack of systems to monitor impacts on biodiversity, lack of systematic integration of biodiversity into relevant policy-making processes, conflicts between biodiversity conservation and sustainable use and local livelihood and poverty reduction, and lack of measurable targets.

Climate change and biodiversity

Introduction

44. Climate change is addressed through both the cross-cutting issue on biodiversity and climate change and through the integration of relevant activities within the programmes of work of the Convention. In fact, climate change related activities are integrated within all of the programmes of work of the CBD with the exception of the programme of work on technology transfer and cooperation.

45. Decisions of the Conference of the Parties on biodiversity and climate change largely focus on cooperation and collaboration particularly with the United Nations Framework Convention on Climate Change. This cooperation is called for at the national level, and through the Joint Liaison Group at the level of the Convention Secretariats and subsidiary bodies.

46. In the third national report, Parties were asked to report on projects for climate change mitigation and adaptation that incorporate biodiversity conservation and sustainable use and coordination efforts to ensure that these projects are in line with UNFCCC and UNCCD requirements.

Synthesis of responses and comments

Projects aimed at mitigating and adapting to climate change that incorporate biodiversity conservation and sustainable use

47. 47% reported on integrating biodiversity conservation and sustainable use into projects aimed at mitigating and adapting to climate change. 42 Parties reported that such projects are currently under development. 18 countries have not implemented any projects yet.

48. The most common avenue for the integration of biodiversity considerations within climate change mitigation and adaptation is through National Adaptation Programmes of Action or national/regional climate change policies. Other projects are being implemented through forestry plans or policies or inland waters and marine and coastal management plans.

Facilitating coordination to ensure that climate change mitigation and adaptation projects are in line with commitments made under UNFCCC and UNCCD

49. 37% reported on coordinated implementation of climate change mitigation and adaptation projects. 37% of Parties reported on activities under development. Only 16% of Parties reported that no efforts have been implemented to facilitate coordination.

50. A number of Parties have undergone extensive efforts to ensure coherence between commitments under the CBD, UNFCCC and UNCCD. The Government of Australia, for example, has adopted a National Biodiversity and Climate Change Action Plan which presents a comprehensive approach to implementing synergies. Other Parties, such as Botswana, have integrated climate change considerations into their National Biodiversity Strategy and Action Plan.

51. Other approaches include supporting coordination between focal points for the three Conventions, and analysing opportunities for synergies among the commitments undertaken within the frameworks of the CBD, UNFCCC, and UNCCD.

Overall assessment of progress and challenges

52. In additional comments provided by more than 50 countries, those countries that have begun working on projects to address climate change, biodiversity and land degradation highlight the importance of:

- a cross-sector approach;
- public education and awareness raising;
- mainstreaming biodiversity considerations within national climate change planning processes;
- the establishment of a coordinating body;
- appropriate legal and policy frameworks;
- the decentralization, where appropriate, of natural resource management.

53. Overall, key barriers identified by Parties include:

- poor or incomplete understanding of climate change impacts;
- slow development of climate change mitigation and adaptation activities;
- lack of technical, human and financial resources;
- weak institutional capacity for coordination and implementation of synergies.

Identification, Monitoring and Impact Assessment (Articles 7 and 14)

Article 7 (Identification and Monitoring)

Introduction

54. Article 7 requires Parties to identify and monitor components of biodiversity for conservation and sustainable use, identify processes and categories of activities which have or are likely to have significant adverse impacts on the conservation and sustainable use of biodiversity, and maintain and organize data derived from identification and monitoring activities.

55. In the third national report, Parties were asked to report on the programmes established to identify and monitor components of biodiversity at species, ecosystem and genetic levels, mechanisms for maintaining and organizing data derived from identification and monitoring activities as well as use of national indicators for monitoring.

Synthesis of responses and comments

56. *Programmes to identify components of biodiversity:* Most reporting Parties (over 70%) have established some programmes to identify components of biodiversity at the genetic, species and/or ecosystem level. Some countries (17%) have established identification programmes at all levels, including at genetic level, and some inventories.

57. The techniques and means used by some countries for identification include:

- Survey and inventorying;
- Biotope mapping;
- National censuses on habitats and species;
- Registration of genetic resources or establishment of gene banks;
- Taxonomic studies or biodiversity assessments;

- A GIS-based monitoring system;
- Bioprospecting.

58. Some developing countries have identified biodiversity components through implementation of internationally-funded biodiversity projects such as biodiversity country studies or participation in international biodiversity-related processes such as the FAO forest resources assessment. Some countries include biodiversity identification as a part of their efforts to investigate and prepare the state of environment report or develop an atlas or red list of certain species and ecosystems.

59. It seems most developed countries had developed or established biodiversity identification programmes covering diversity of species, ecosystems and genes. It should be noted that some developing countries also put in place such programmes, though many of them, particularly LDCs, are experiencing difficulties in setting up identification programmes. For example, Nature Kenya and National Museums are coordinating a national Important Bird Areas monitoring scheme with a two-tiered approach: (i) basic monitoring in sixty sites representing 10% of Kenya's land mass focusing on ecosystems changes, (ii) detailed monitoring for five of the sixty sites, tracking changes in threatened species and their habitats. Nature Kenya and Birdlife International are conducting monitoring work at species and landscape levels at some sites within the Eastern Arc Mountains and Coastal Forests Hotspot in Kenya.

60. *Systematic monitoring programmes for biodiversity components:* 94 Parties have established monitoring programmes at species level and 86 countries have established monitoring programmes at ecosystem level. 50 Parties also put in place such programmes at genetic level. Though various monitoring programmes are in place, many countries differ in scale or scope of monitoring. Some countries, such as Australia and Canada, have established comprehensive monitoring programmes covering a wide range of species and ecosystems at various levels, while some countries focus more on those species or ecosystems that had been identified as endangered or rare. Some countries also focus on those ecosystems which are considered crucial to biodiversity, such as forests, wetlands, agroecosystems, marine and coastal ecosystems. Many European countries established monitoring programmes also to meet the requirements arising from related regional directives and frameworks, such as NATURA 2000, the EU Habitat Directive and the EU Water Frameworks.

61. Techniques and means of monitoring also vary among Parties that had put in place such programmes. Some countries use satellite monitoring. Some countries focus on species-oriented monitoring. Some countries monitor by using various indicators. For example, Canada monitors ecosystem integrity by focusing on three indicators, namely plant and animal diversity, ecosystem processes and principal stressors. Some countries such as Malaysia are applying DNA techniques to identify genetic diversity.

62. *Monitoring programmes on key threats to biodiversity:* 61 countries had put in place monitoring programmes on invasive alien species and climate change. 85 countries had established such programmes on pollution, 75 countries on land use and 71 countries on unsustainable use or overexploitation of natural resources. A few countries had monitoring programmes for fisheries. A number of countries are also monitoring threats to protected areas. Many countries provided detailed information concerning their respective programmes established to monitor some or all threats to biodiversity mentioned above. Indonesia has developed monitoring programmes for IAS in protected areas, projects that have impacts on biodiversity, coral reefs and oil spills in some marine areas. Indonesia has also developed methods for monitoring climate change impacts on the environment, particularly on forest and agricultural biodiversity.

63. *Mechanism to maintain or organize data or information derived from inventories and monitoring programmes and for information collection:* 53 Parties have established and 47 countries are

establishing some mechanisms to maintain or organize data or information derived from monitoring programmes. A number of Parties (13), mostly developed countries, have established a relatively complete system of data or information collection and maintenance. In many Parties, data or information concerning biodiversity components are collected and/or maintained by different sectors and institutions. However, in some Parties, a coordinated system is established to maintain and disseminate biodiversity-related information and data. For example, Australia, Canada and Denmark have established their national biodiversity information facilities (partly to support the Global Biodiversity Information Facility) that act as a national node for maintaining and disseminating information or data on biodiversity. Some countries also use their national Clearing-House Mechanism to maintain and disseminate relevant data and information. Though there is no system of information or data collection and maintenance in place, some countries have established databases particularly for certain species (usually endangered), habitats and ecosystems. A few countries are also cooperating on biodiversity information and data collection and maintenance, such as an integrated taxonomy information system established by Canada, USA and Mexico.

64. *Use of national indicators for monitoring:* Around half of countries reported that they had identified and are using some indicators for monitoring. The other half are either identifying or yet to identify indicators for monitoring. It should be noted that some of these indicators are not developed particularly for biodiversity monitoring, but as a part of the environmental monitoring and reporting system or measuring the overall sustainable development. Some countries have developed and are using indicators for monitoring specific species and ecosystems such as forests. A number of countries are using a similar set of indicators, such as status and trends of species and ecosystems, coverage of protected areas and conservation status.

Overall assessment of progress and challenges

65. Many reporting countries have put in place some monitoring and/or identification programmes, some of which focus only on certain species and ecosystems. Generally speaking, developed countries, including some countries with economies in transition, have established relatively more comprehensive monitoring programmes. As far as the effectiveness of monitoring programmes is concerned, many countries indicated that this is difficult to assess at this stage. It is, however, encouraging to note that some countries have established some baselines for monitoring or produced some inventories or red lists based on monitoring results. Though programmes are in place for monitoring and data collection, some countries are experiencing difficulties in data processing and maintenance. Data aggregation is particularly challenging for some countries due to the fact that data is collected and maintained by different sectors and institutions. Many countries need to do more with regard to identifying and using indicators for monitoring.

66. Main challenges for implementing this Article include:

- Lack of coordination among monitoring programmes;
- Institutional weakness and lack of technical expertise or manpower;
- Lack of systematic collection, processing and maintenance of data and information;
- Need for political support;
- Lack of local capacities for monitoring;
- Lack of engaging stakeholders or effective partnerships;
- Difficulty in prioritising focus of monitoring and lack of systematic monitoring;
- Lack of adequate indicators, baselines and methodologies;
- Lack of financial resources.

Article 14.1 (Impact Assessment)

Introduction

67. The Conference of the Parties has adopted a number of decisions on Article 14, such as decisions V/18, VI/7, VI/11, VII/7 and VII/17. Article 14 (1), provision concerning impact assessment, has been referred to in a number of other decisions. One of the key developments related to Article 14 is that the sixth meeting of the Conference of the Parties adopted the draft guidelines for incorporating biodiversity-related issues into environmental impact assessment (EIA) legislation and/or processes, and into strategic environmental assessment (SEA).

68. In the third national report, Parties were asked to report on development of legislation requiring EIA of projects likely to have adverse effects on biodiversity, mechanisms for ensuring assessments of those strategies or policies likely to have adverse impacts on biodiversity, mechanisms for addressing transboundary impacts and national emergency response mechanisms.

Synthesis of responses and comments

Legislation and procedure on environmental impact assessment (EIA) and strategic environmental assessment (SEA)

69. Most responding Parties (86%) have impact assessment legislations and procedures at project level (EIA) in place. Over half of country Parties have also developed impact assessment legislations and procedures for programmes and policies (SEA), while some others (39%) are in the process of developing SEA legislation and procedures. A few Parties reported that they had not put in place any laws or policies for EIA or SEA.

70. Most (73%) Parties also reported implementing bilateral, regional and/or multilateral agreements on activities likely to significantly affect biological diversity outside their jurisdiction. Only some countries (38%) reported having mechanisms in place to prevent or minimize danger or damage originating in their territory to biological diversity in the territory of other Parties, or in areas beyond the limits of national jurisdiction.

71. Many respondents (47%) have established national mechanisms for emergency response to activities or events which present a grave and imminent danger to biological diversity, and some others (31%) are in the process of developing such mechanisms.

72. Most countries reported that their impact assessment legislation and procedures are designed to minimize negative impacts on biodiversity. Only some (24%), however, reported applying major aspects of the guidelines on biodiversity considerations in impact assessment (decisions VI/7-A and VIII/28), while some others (35%) were applying some aspects of the guidelines. This may be attributed to the relatively recent development of the guidelines and the periodicity of typically about a decade between modifications of impact assessment legislation and/or procedures.

73. Countries reported on a variety of mechanisms in place to ensure that due consideration is given to the environmental consequences of national programmes and policies that are likely to have significant adverse impacts on biological diversity. These include: strategic environmental assessment legislation for development plans, policies, programmes and strategies; sectoral impact studies; inter-ministerial committees; inter-agency consultation on all major programmes, policies or modifications; partnerships of public/private sectors, universities and NGOs to address impacts of agriculture, animal husbandry and aquaculture on biodiversity; special environmental committees; sanctions, incentives, compensation and enforcement measures; and the development and application of best practice guidelines.

Overall assessment of achievements and challenges

74. Impact assessment processes are in place and applied in many countries, yet biodiversity is often inadequately addressed. There is a growing recognition of the need to better reflect biodiversity considerations in environmental impact assessments and in strategic environmental assessments.

75. Specifically, countries reported on several positive outcomes of implementing Article 14.1 including:

- The reinforcement of impact assessment legislation and institutional framework;
- A growing number of environmentally sound projects;
- Greater awareness of environmental legislation;
- Greater awareness of the importance of impact assessment as tools for environmental and biodiversity protection;
- Introduction of the assessment of the environmental consequences of national policies and programmes;
- Bilateral collaboration on impact assessment;
- Introduction of independent impact assessment review committees;
- Publication of guidance material on incorporating biodiversity issues into EIA and SEA, including sector-related (e.g. trade; forestry) and issue-related (e.g. wetlands; migratory species; protected areas) guidance.

76. Countries also reported on a number of obstacles hampering the full application of impact assessment tools. These include:

- Inadequate human and financial capacities, in particular limited capacities to carry out assessments;
- Lack of quality and availability of environmental data and of information necessary for the full identification of the impacts of development activities, including limited knowledge and scientific basis to develop biodiversity evaluation criteria, particularly with regard to genetic diversity, and insufficient exchange of knowledge, technology and experience;
- Narrowness of project inclusion lists;
- Weak institutional structures and limited intersectoral coordination often coupled with a lack of political will and leadership and a lack of transparency and accountability;
- Inadequate monitoring and enforcement of impact assessment regulations and of mitigation measures, reported largely as a consequence of lack of institutional structures and financial and human resources;
- Lack of ongoing qualification and certification process for environmental service providers;
- Limited resources to review, monitor and enforce impact assessment decisions leading to delays in decision-making and project approval, and inadequate post-project monitoring;
- Lack of meaningful public and stakeholder participation in environmental planning and management often linked to poverty, low levels of education, lack of awareness of environmental and biodiversity issues;
- Limited commitment to biodiversity conservation, including on the part of the private sector, and prioritisation of economic objectives and needs.

In-situ Conservation (Article 8 i,k,l)*Introduction**Synthesis of responses and comments*

77. Provision of conditions for compatibility between present uses and biodiversity conservation and sustainable use: Most Parties report that they have undertaken measures to ensure compatibility between

present uses of biodiversity and biodiversity conservation and sustainable use, with some countries having put in place comprehensive measures in this regard. One common measure taken by many countries for implementing this provision is to establish various categories and networks of protected areas. Many countries have developed and adopted relevant laws and policies that require sustainable use of natural resources and biodiversity components. A few countries indicated that requirements for environmental impact assessment are implemented to this end. Some countries have put in place special licensing or permit systems for use of some natural resources, in particular those endangered species, populations or threatened ecosystems. Many countries also included objectives and actions in their NBSAPs and relevant sectoral strategies and policies, in particular forestry, fishery, agriculture and tourism, whose implementation aims to ensure compatibility between present use and conservation of biodiversity. Some countries mentioned programmes and projects they had implemented or are implementing for the purpose of creating conditions for compatibility between present and future uses of biodiversity. A few countries particularly mentioned their community-based programmes that are developed to increase local communities' capacity for biodiversity conservation and sustainable use. A few countries are employing a mix of measures to achieve the balance between present use and conservation of biodiversity. For example, Australia uses a combination of law, cooperative arrangements in the federal government and incentive and market-based measures to realize compatibility between resource use and biodiversity conservation.

78. *Development or maintaining of necessary legislation for protection of threatened species and populations:* Nearly all countries report that they have developed legislations or policies or plans for protection of threatened species and populations. Many countries have developed wildlife protection laws, nature conservation laws or other similar legal acts that provide strict protection of those threatened species and populations. Many countries have also developed and adopted sectoral regulations for management of various natural resources and ecosystems, such as forest, water resources, fishery, to name a few, which contain provisions for protecting habitats of threatened species and populations. A number of countries have also included in their broader laws such as the environment act, criminal penal code and constitution, provisions that provide protection of threatened species and populations. In addition to these laws and regulations, some countries have also promulgated some administrative orders, government /royal decrees and proclamations or sectoral policies that serve as regulatory instruments to protect threatened species. Some countries have put in place requirements for environmental impacts assessment or licensing or permitting systems that aim to minimize impacts on threatened species. In some countries, red lists or data books of threatened species are published for their protection. A number of countries indicate that they are implementing the CITES and other international environmental agreements which also provide protection for some threatened species. Many EU member states have transposed to national laws relevant EU directives such as the EU Habitats Directive and Bird Directive, which also provide protection for threatened species.

79. *Regulating or managing processes and activities identified under Article 7 as having significant adverse effects on biodiversity:* Most countries report that they have put in place legislations, rules, policies to regulate or manage processes and activities that have significant adverse effects on biodiversity. Many countries have adopted rules or laws that require environmental impacts assessment to regulate or manage those processes or activities that have adverse impacts on biodiversity. Some countries adopted bans or licensing or permit systems to ensure impacts of some activities on biodiversity can be minimized or avoided. In addition, many laws or other regulatory instruments or policies mentioned above also require that these processes or activities should be regulated or managed. Some countries have also developed best practice codes or guidelines for regulating or managing some processes or activities that have adverse impacts on biodiversity. A few countries also engage relevant actors in particular the private sector to provide proper guidance to their activities that may have adverse impacts on biodiversity.

Overall assessment of achievements and challenges

80. Overall, most countries report that they have put in place various legal, policy and institutional frameworks and relevant programmes to create conditions for compatibility between present use and conservation of biodiversity, to protect threatened species and populations as well as to regulate or manage those processes and activities that have adverse impacts on biodiversity. In addition to domestic legal and policy instruments, a number of countries also implement some regional and international legal or policy frameworks to achieve these objectives. However it seems unclear to what extent these legal and policy frameworks have been enforced or implemented and whether any specific impacts or outcomes have been generated as a result of their implementation.

81. Main challenges identified by many countries include:

- Lack of financial, human and technical resources;
- Inadequate political support and inadequate legal and policy frameworks and weak enforcement;
- Limited capacities;
- Difficulty in handling conflicts between short-term and long-term goals, such as poverty reduction and biodiversity conservation;
- Lack of inter-sectoral coordination;
- Low-level public awareness and lack of participation of relevant stakeholders.

*Protected Areas (Article 8 a to e)**Introduction*

82. At its seventh meeting, the Conference of the Parties in decision VII/28 adopted a programme of work on protected areas. In paragraph 28 of this decision, the Conference of the Parties decided to assess at each of its meetings until 2010, progress in the implementation of the programme of work on protected areas, and to determine the need for more effective measures and additional financial and technical support to reach the 2010 target. The format for the third national report contains nine questions related to the programme of work on protected areas mainly covering those activities that have a timeline of 2006. The synthesis below is organized by activities covered in the third national report rather than strictly by order of questions.

*Synthesis of responses and comments**Activity 1.1.1: Establish suitable time-bound and measurable national and regional level protected area targets and indicators (time line 2006)*

83. 55% of the reporting Parties indicated establishment of some targets and indicators for protected areas while 18% of countries have established comprehensive targets and indicators. In 23 other reporting countries, the process of establishing targets and/or indicators for protected areas is under way. However, only a few countries provided additional information to supplement their answer to this question. Countries that are part of the European Union are linking protected area targets to the Natura 2000 network process under the EU Wild Birds and Habitats Directives. In other countries, area-based protected area targets have been articulated in relevant environmental policies, national strategies for sustainable development, national biodiversity strategies and action plans, national wildlife action plans and sectoral policies and programmes. In Canada and Indonesia, targets for marine protected areas have also been established. Some reporting countries specified time-bound targets for implementation of management action plans (Denmark), nature objective plans (Belgium), finalization of legal requirements (Estonia), and species-based conservation plans (China and Hungary) for protected areas. The area-based protected area targets ranged from 5.74% to 25% of the total geographical area of countries by 2010, 2015 or 2050.

Activity 1.1.2: Establish or expand protected areas in any large, intact or relatively unfragmented or highly irreplaceable natural areas, or areas under high threat, as well as areas securing the most threatened species, and taking into consideration the conservation needs of migratory species (time line 2006)

84. 63 countries reported that they had taken significant actions and 43 countries had taken limited actions in this regard. Most of them have already established new protected areas or have plans to expand existing protected areas. However, only a few countries provided detailed information regarding whether those protected areas cover large, intact or unfragmented natural areas, or areas under high threat, as well as areas securing the most threatened species. While the primary criterion for expanding existing areas or establishing new areas is the consideration of ecological parameters, some countries reported consideration of social and cultural criteria also. An analysis of reports reveals that establishing/expanding protected areas *inter alia* covered:

- (a) Various biomes and high priority areas: Plateau wetlands, cold meadows, moorlands, high mountain forests, bogs, salt marshes, coastal meadows, and centres of species richness or endemism;
- (b) Threatened species: Tibetan antelope, wild yak, and wild ass.

Activity 1.1.3: Address the under-representation of marine and inland water ecosystems, taking into account marine ecosystems beyond areas of national jurisdiction, and transboundary inland water ecosystems (time line 2006 for terrestrial and 2008 for marine)

85. Implementation of this activity by coastal countries resulted in a modest increase in the marine area protected globally. 41 countries reported undertaking significant actions while 46 countries reported taking limited actions to increase representation of marine and inland ecosystems in protected areas. Many countries have plans to increase the extent of Marine and Coastal Protected Areas (MCPAs) covering the habitat of rare and endangered marine species, as well as to include marine territories of importance as wintering, nesting and resting sites of migratory species in existing terrestrial protected areas. Some reporting coastal countries have already declared and gazetted some MCPAs. In accordance with the programme of work on marine and coastal biological diversity under the Convention on Biological Diversity (decision VII/5), national systems or networks of MCPAs are also becoming more common. 21 of the reporting coastal countries have such a system or network under development, while 11 countries have no such system in place.

Activity 1.1.5: Conduct protected area gap analysis taking into account Annex I of the Convention and other criteria such as irreplaceability, minimum effective size and viability requirements, integrity, and ecological processes (time line 2006)

86. Very few reporting countries indicated that they had conducted protected-area gap analysis, and in another six countries some limited action is under way. In EU Member States, the criteria stipulated in the Birds and Habitat Directives for designating “Special Protection Areas” and “Sites of Community Importance” under the Natura 2000 network, largely take into account Annex I of CBD and other scientific criteria which Member States apply while establishing these sites. In Canada, some provincial governments have undertaken protected area gap analysis. Australia established the National Reserve System Programme, under the Natural Heritage Trust, for creating a comprehensive, adequate and representative system of protected areas and funded many projects to review information deficiencies and gap analysis in the reserve systems at State and territory levels. In Turkey, the Ministry of Environment and Forestry has undertaken gap analysis under the scope of different projects. In India, a gap analysis of protected area coverage has been conducted by the Wildlife Institute of India, a specialized agency, using various criteria.

Activity 1.2.1: Identify and implement practical steps for improving the integration of protected areas into broader land and seascapes (time line 2008)

87. 62 countries indicated that some steps had been identified and implemented while 21 countries had identified and implemented comprehensive steps in this regard. 23 countries said that identifying such steps is under way. However, detailed information was limited on steps or actions taken for integrating protected areas into broader land and seascapes. In countries such as EU member States and Australia, relevant regulations or regional development plans require management of protected areas in the broader context to make sure that the activities in the areas adjacent to protected areas will not have negative impacts on protected areas (e.g., the “beyond sites” requirement of the EC Bird and Habitat Directives; Australia’s “Directions for the National Reserve System”). In Austria, Botswana, Canada, Denmark, and Finland, protected areas are integrated into surrounding areas through a formal approach consisting of establishing ecological corridors, core areas, buffer zones and Biosphere Reserves. In Canada, a less formal approach consisting of collaboration in regional planning exercises, joint research, and participation by protected-area staff in the environmental review of projects in adjacent regions, is also being used. Canada published best practices, case studies and examples of managing protected areas in a broader landscape. In Thailand, the Ecosystem Approach is being applied for management of protected areas and their integration within the wider landscape.

88. There has been less effort in integrating marine and coastal protected areas into the surrounding seascape. According to the marine and coastal section of the third national report, only 15 responding countries reported complementing their national system of marine protected areas with sustainable management practices over the wider marine and coastal environment. Development of a comprehensive oceans policy was being considered in another 10 responding coastal countries, with some existing policies, such as the Pacific Islands Regional Oceans Policy, the Australian Oceans Policy and the Canadian Oceans Strategy, providing examples of a comprehensive strategy for managing coasts and oceans.

Activity 1.5.1: Apply environmental impact assessment guidelines to projects for evaluating effects on protected areas (time line 2008)

89. Most countries (84%) indicated development and/or enactment of some or comprehensive policy and legislative frameworks that require environmental or strategic impact assessments for projects or plans that have impacts on biodiversity and protected areas. Some countries (e.g., Bosnia and Herzegovina) reported that such rules are being developed under environmental protection law. At the Canadian federal level, environmental considerations are integrated into new policies, programmes and plans through the strategic environmental assessment process.

Activity 1.5.5: Assess key threats and develop and implement strategies to prevent or mitigate such threats (time line 2008)

90. Almost all responding countries reported having undertaken assessment of threats to protected areas. In general, threats to protected areas are identified as part of the preparation of the management plan for individual protected areas. Some countries (e.g., Australia, Canada) reported different degrees of assessment of threats by different jurisdictions, with some of them having more detailed assessments and some others still planning and preparing assessments. Although the identified threats to protected areas vary from country to country because of different national circumstances, there are a number of common threats including, *inter alia*: habitat fragmentation, conflicting adjoining land use, invasive alien species, mining and oil drilling, pollution, altered fire and hydrological regimes, visitor impacts, hunting, farming practices and climate change.

Activity 3.1.1: Identify legislative and institutional gaps and barriers that impede effective establishment

91. Most reporting countries (81%) indicated identifying some or many gaps and barriers that impede effective establishment and management of protected areas. From the information provided, some of the common constraints are: limited financial resources; lack of trained personnel; competing needs on land for agriculture and recreation; lack of intersectoral coordination; compensation issues and land tenure rights. Many countries, including developed countries, noted an inadequacy in investments for protected areas. Canada, EU Member States, India, and Zimbabwe have already put in place legislation for protected areas while China is in the process of developing new legislation for protected areas, and the United Kingdom is developing a new marine bill.

Activity 3.2.1: Undertake national capacity-building needs assessment and establish capacity-building programmes (time line 2006)

92. 62 countries reported that they had undertaken a basic needs assessment while 14 countries had done a thorough assessment. 28 countries said that an assessment is under way. For capacity-building programmes, a number of countries provided details on relevant activities and initiatives. Australia indicated that it has a number of forums amongst jurisdictions to share experiences, including capacity-building programmes, and it is now working on ways and means to build capacity for non-government protected area managers. Canada indicated undertaking initial steps to develop curricula for training staff and managers of protected areas. China prepared a “Guide on Assessment of Management of Nature Reserves of National Level” for enhancing the management of nature reserves. The EC is in the process of conducting the Natura Network Initiative for capacity-building through the sharing of best management practices in Natura 2000 sites.

Activity 3.4.2: Implement country-level sustainable financing plans that support national systems of protected areas (time line 2008)

93. Only 22 countries indicate that they are implementing relevant financing plans. Meanwhile 31 countries say that such a plan is in place and 34 countries are developing such a plan. 30 countries clearly indicate that they do not have such a plan. Over thirty responding countries indicated that the major source of funding for protected areas is national and provincial budgets. A majority of reporting countries, including developed countries, find resources for the establishment and management of protected areas limited or very limited. Very few countries reported on the level of protected-area funding and estimated expenditure for implementing the programme of work on protected areas. Some developing countries indicated supplementing the national budgetary allocations to protected areas with bilateral and multilateral funding from donors. Very few countries indicated the nature of supplementary funding mechanisms. None of the responding countries provided detailed information on the sustainability of financing plans. Some of the supplementary funding measures reported by countries are trust funds (Indonesia, Palau, Bolivia, Colombia, Cuba, Ecuador, Peru, Panama), appropriation from tax revenues (Canada), user fee and visitor services (Botswana, Canada, Namibia), environmental taxes (Estonia), community funds (EC), income from the sale of State-owned lands (Finland) and agri-environment measures under rural development programmes (United Kingdom).

Activity 4.2.1: Implement appropriate methods, standards, criteria and indicators for evaluating the effectiveness of protected areas management and governance

94. 54 reporting countries indicated that some standards, criteria and indicators, both national and international, are in use for evaluating the effectiveness of their protected areas management. 32 countries indicate that such standards and indicators are under development while 29 countries say that they have not developed standards or indicators in this regard. The periodicity of review assessments on the effectiveness of protected areas management varies from country to country. Some countries

evaluate protected areas every five or six years (EU member States), while others review their protected areas management effectiveness when the management plans for protected areas have to be revised. In Canada, protected area agencies focus on measurable objectives and performance indicators for management planning, using “ecological integrity” as an indicator. Canada has developed guidelines to evaluate effectiveness of protected areas management consistent with IUCN best-practice guidelines. China has developed “Guide on Assessment of Management of Nature Reserves” and “Technical Guidelines on Management of Oceanic Nature Reserves”. China is in the process of revising classification standards of nature reserves and drawing up the supervision and management rules of nature reserves. In Finland, Metsähallitus, the authority responsible for managing protected areas, organized a comprehensive international evaluation of the management effectiveness of Finland’s protected areas. “Rapid Assessment and Prioritisation of Protected Area Management” and “Warranty of Performance Responsibility” are being used for evaluating effectiveness in Indonesia and Thailand, respectively. In the United Kingdom, the statutory conservation agencies carry out site assessment in accordance with common standards produced by the Joint Nature Conservation Committee.

Overall assessment of progress and challenges

95. The following findings may be drawn from the above synthesis:

- The widely-implemented activities are 1.1.1 (protected area targets); 1.1.2 (expansion of existing ones and establishment of new protected areas); 1.5.1 (application of impact assessment guidelines); 1.5.5 (assessment of key threats) and 3.1.1 (identification of institutional gaps and barriers);
- One of the major impediments for effective implementation of the programme of work is lack of adequate financial resources. Developing countries, as well as some developed countries, cited inadequate investments in protected areas;
- Among the various activities, the synthesis of information on implementation of activities 1.1.5 (gap analysis), 1.2.1 (integrating protected areas into wider landscapes and seascapes), 3.4.2 (country level sustainable financing strategies), and 4.2.1 (evaluating the management effectiveness of protected areas), clearly indicated the need for capacity-building in developing countries;
- In the case of activity 3.4.2 (country-level sustainable financing plans), in addition to training workshops, there is also an urgent need to initiate some pilot projects to test some of the available financial strategies in different country situations to gain confidence for their replication in other countries;
- Building strong institutional arrangements for implementing the programme of work is essential. Other biodiversity conventions, institutions, and Governments need to create synergy and partnerships with international non-governmental organizations, facilitating implementation of the programme of work.

Alien Species (Article 8h)

Introduction

96. The Conference of the Parties acknowledged the urgent need to address the threat of invasive alien species (IAS) at its fourth meeting (decision IV/1) in 1998. Invasive species occur in and affect all major taxonomic groups and ecosystems and is considered a cross-cutting issue applicable to all the work

programmes of the Convention. The Conference of the Parties has addressed IAS, most notably in decisions V/8, VI/23, VII/13 and VIII/27.

97. The third national report contains 12 questions on Article 8 (h), primarily covering development and implementation of national invasive species strategies and action plans and the IAS Guiding Principles.

Synthesis of responses and comments

Identification of alien species introduced into its territory and establishment of a system for tracking the introduction of alien species

98. Many Parties (63%) have identified some species but have not established a tracking system. Some Parties (27%) have identified some or all IAS of major concern, with a tracking system in place. A few Parties have neither identified IAS nor established a tracking system. A larger percentage of industrialized Parties have some or all major IAS identified with tracking systems in place than do developing countries and Parties with economies in transition. For example, Switzerland has established a black list to register those alien species that have caused damage and a watch list to record those alien species with the potential to cause damage or that have caused damage in neighboring countries.

Assessment of the risks posed to ecosystems, habitats or species by the introduction of these alien species

99. Only a few Parties (11%) have assessed risks to ecosystems, habitats and species for most alien species. Most Parties (71%) have assessed risks, but only for species of concern. All industrialized Parties, including some countries with economies in transition, have assessed risks posed by some or most IAS.

100. Many comments provided by Parties did not directly deal with risk assessment but described projects and researches on species that have invaded local ecosystems. About one third of Parties reported on research/risk assessments of IAS in aquatic ecosystems. Some Parties reported projects on agro-ecosystems and a few commented on projects in marine and coastal, forest and island ecosystems. Certain Parties mentioned research on certain invasive taxonomic groups: almost half of the Parties cited plants/trees; some Parties had done risk assessments for fish, terrestrial vertebrates/reptiles/amphibians, insects/invertebrates; and a few Parties mentioned microorganisms and marine/ aquatic zoobenthic organisms.

101. Some African countries, indicated that they had conducted researches and/or risk assessments on the water hyacinth (*Eichhornia crassipes*) which is considered the world's worst invasive aquatic weed, and is indigenous to the Amazon Basin of South America. It occurs in more than 50 countries on five continents. Finland and a few CEE countries mentioned American mink (*Mustela vison*) and the raccoon dog (*Nyctereutes procionoides*) causing damage to local fauna. Lithuania reports that the European mink (*Mustela europea*) has been completely replaced by the American mink and is now considered extinct.

Measures undertaken to prevent the introduction of, control or eradicate, those alien species which threaten ecosystems, habitats or species

102. Most Parties (83%) have some preventive measures in place and only a few have established comprehensive measures. A larger percentage of industrialized Parties have comprehensive measures in place compared to other economic groups of countries.

103. Approximately half of responding Parties mentioned legislation and policies that contain provisions and measures to prevent the introduction of, control or eradicate alien species. Approximately

one quarter of responding Parties mentioned surveillance/monitoring programmes at the point of entry. Some Parties reported management techniques, quarantines and physical/chemical/phytosanitary measures. A few Parties mentioned EIA/risk assessment, outreach/education, collaboration, research, biocontrol and a national strategy/action plan as preventive measures.

104. An important example of preventive measures cited by many countries is the Global Ballast Water Management Program (GLOBALLAST), funded by UNEP/GEF, which is an initiative of the International Maritime Organization, member states and shipping industry. GLOBALLAST supports developing countries with reducing the transfer of marine IAS through ballast water. Many countries have also developed their own national plan for dealing with ballast water.

Development of or involvement in mechanisms for international cooperation to deal with invasive species

105. 64 Parties reported regional and/or subregional cooperation to address IAS issues. 24 Parties had established mechanisms for bilateral cooperation; 31 Parties noted multilateral cooperation; and 28 Parties indicated that they were not involved in any mechanisms for international cooperation. In terms of percentage, industrialized economies have the highest rate of participation in bilateral, regional/subregional and multilateral cooperation in this field. Over half of developing countries engage regional/subregional cooperation to deal with IAS.

Use of the Ecosystem Approach and precautionary and bio-geographical approaches in its work on alien invasive species

106. Many Parties (59%) reported that they are using the ecosystem, precautionary and biogeographical approaches in their work on IAS. However, many Parties (41%) responded that these approaches were not being used.

107. Comments provided by Parties were on a wide range of topics and various activities/projects/research were described in different ecosystems: forests, aquatic/inland waters, protected areas, arid/semi-arid lands, agro-ecosystems, mountains and marine and coastal ecosystems. Some Parties commented on some precautionary measures that may involve the ecosystem and biogeographical approach: legislation/policy, regulations on the import of aliens at points of entry, control programmes, phyto-sanitary and quarantine measures, and risk analysis. The taxonomic group most often cited as involving the use of the three approaches was plants.

108. The Ecosystem Approach appears to be more commonly used than other approaches mentioned. In Nepal, the Ecosystem Approach has been introduced for the conservation of protected areas. In Poland, the Ecosystem Approach is applied by the phytosanitary, veterinary, and forest services. Singapore uses the Ecosystem Approach in the Plant Conservation Strategy, in identifying Important Plant Areas (IPAs) and assessing sites for conservation activities. In Armenia, recent research on plant IAS is based on the Ecosystem Approach, which includes geo-botanical descriptions of the plant community. European Commission-funded projects from the Nature component of the LIFE programme are based on the Ecosystem Approach. These projects are coordinated to apply a common conservation strategy over indigenous species' natural range.

109. The precautionary approach has been used by many countries with regard to legislation, quarantines and procedures at points of entry. For example, the precautionary approach has been applied in the Czech Republic in phytosanitary and veterinary legislation. The precautionary approach has been applied in Indonesia by implementing quarantine procedures at the points of entry and of exit.

110. Few countries commented on the biogeographical approach which appears to be less commonly used by Parties compared to the ecosystem and precautionary approaches. In India, the biogeographical

approach has promoted the sharing of information among neighbouring states. In Canada, elements of the Ecosystem Approach, precautionary and bio-geographical approaches are used in the plant protection program and to address the threat of aquatic IAS. In Poland, the bio-geographical approach has been applied in the context of plant IAS in Specially Protected Areas. In China, GIS and GPS are used to perform adaptability analysis for potential IAS.

Identification of national needs and priorities for the implementation of the Guiding Principles

111. Only some Parties (15%) have identified their needs and priorities for the implementation of the Guiding Principles, while some Parties (34%) have not. Half of responding Parties reported that they are identifying their needs and priorities.

112. Comments from responding Parties were very scattered on this subject matter. The most common avenue of assessing needs and priorities was through development of national strategies or action plans. China is currently drafting “National Planning on Prevention and Control of Invasive Alien Species” and the priorities are to improve relevant legislation, management of IAS, public awareness and risk assessment, and to develop technologies for early warning, monitoring and eradication. In Ethiopia, Uganda and Zambia, major regional needs and priorities were identified through a GEF-funded project “Removing Barriers to Invasive Plant Management in Africa”. Needs and priorities identified include strengthening policies, institutions and capacities; disseminating information on risk, impacts and management of IAS; and implementing strategies for prevention and management of IAS. Lebanon has developed an action plan to address major priorities which include the establishment of a monitoring strategy, the development of legislation for marine and coastal habitats, and monitoring of marine biodiversity using bio-indicators. Poland, through its action plan, is prioritising recording and monitoring of IAS, exploring invasion sources and pathways, impacts on native species and ecosystems, and economic effects of invasions.

Mechanisms to coordinate national programmes for applying the Guiding Principles

113. Only a few Parties (12%) had mechanisms in place to coordinate national programmes for applying the Guiding Principles and many Parties (40%) had mechanisms under development. Almost half of responding Parties (49%) had not created such mechanisms.

114. In comments provided by Parties, the most common mechanisms to coordinate national programmes were steering committees, national strategies and action plans and coordination between government departments and ministries. In Canada, mechanisms for coordination were created within the national strategy for IAS. A virtual secretariat was established to coordinate policy, manage a communication programme and coordinate rapid response. In Chile, a national operative committee for inter-institutional coordination for the control of invading species was established in 2005. This committee works within the framework of the Plan of Action of the National Biodiversity Strategy. One of the long-term objectives of this committee is to implement the Integrated National Program for the Control of Invading Species by 2015. In France, the National Council for the Protection of Nature coordinates and integrates IAS issues into conservation policy. In the Netherlands, the Ministry of Agriculture, Nature and Food Quality is considering establishing a coordinating commission for IAS. In Malawi, an expert working group on IAS has been established to identify training needs, develop educational materials and mainstream IAS issues into relevant national programmes. A few Parties also mentioned coordination at the border, quarantine measures and legislation, as mechanisms for national coordination of IAS issues.

Review of relevant policies, legislation and institutions in the light of the Guiding Principles, and adjusted or developed policies, legislation and institutions

115. Few Parties (6%) have made adjustments and completed development of relevant policies, legislation and institutions and many Parties (41%) have not. Some Parties (29%) are reviewing their relevant policies, legislation and institutions. A few Parties (13%) have ongoing adjustment and development, and few Parties (11%) have completed review with the adjustment proposed. About half of developing countries and countries with economies in transition have not reviewed, adjusted and/or developed policies, legislation and institutions, while most industrialized countries have undertaken the review and adjustment.

116. Of the countries that had completed adjustments and developments, few provided details on the extent of changes introduced to relevant legislation, policies and institutions, as a result of reviews undertaken. Development of national invasive species strategies was often cited as a means of integrating relevant policies, although many Parties reported that only reviews and analyses had been undertaken. Many countries listed new laws and policies that contain provisions and measures to address IAS.

Enhancing cooperation between various sectors in order to improve prevention, early detection, eradication and/or control of invasive alien species

117. Some Parties (29%) stated that mechanisms were in place for cooperation between sectors. Over half of responding Parties (53%) reported no sectoral cooperation, but potential mechanisms were under consideration; and some Parties (17%) have no cooperation between sectors.

118. Cooperation mechanisms are established mostly in the form of coordinating groups and committees, and through development of national strategies and action plans. For example, in Cameroon, committees were created in 2005 to link committees established in various sectors such as the Phytosanitary Committee, the Committee of Biological Diversity, Committee on Environment; Committee on Biosecurity etc. In Canada, the National Invasive Species Strategy is enhancing cooperation between sectors to improve prevention, early detection, rapid response and management of IAS. China has set up a cross-sectoral coordinating group on prevention and control of IAS. The European Community has developed several related plans that provide a framework for enhanced cooperation between sectors. In the Philippines, a National Committee on Biosafety has developed a set of guidelines that provide a framework for enhancing sectoral cooperation to improve prevention, eradication and control of IAS. In Samoa, a national IAS Steering Committee has been established representing over 30 agencies involved in preventing and reducing impacts of IAS.

Collaborating with trading partners and neighboring countries to address threats of invasive alien species to biodiversity in ecosystems that cross international boundaries

119. Some Parties (21%) have relevant programmes in place, however, some Parties (33%) were not collaborating with trading partners and neighbouring countries to address threats of IAS. Many Parties (46%) have relevant collaborative programmes under development. More industrialized Parties have developed programmes for collaboration with neighbouring countries and trading partners, compared to developing countries and Parties with economies in transition.

120. Almost half of responding Parties cited collaboration with neighbouring countries and some Parties (17%) mentioned collaboration with trading partners. In this regard, the Global Invasive Species Programme (GISP), that provides opportunities for countries to work together to address IAS, was also mentioned by a number of countries. The Australian government provides the current Chair of GISP who has led negotiations on the new legal framework, involving global organizations such as IUCN and

CABI. The Southern African Biodiversity Support Programme is funded by GISP and has formulated regional guidelines and established a best practices database on IAS management.

121. Collaboration also exists for phytosanitary measures. The European Community participates in the development of legal measures for ballast water management and international phytosanitary standards. Regional cooperation is offered through the Pan-European Biological and Landscape Diversity Strategy (PEBLDS) and engagement in invasive species work is carried out by the Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention).

122. Australia has been undertaking extensive collaboration with its neighbouring countries to address IAS, in particular in strengthening their capacities to prevent the introduction of IAS. Australia and New Zealand are part of the Asia Pacific Invasive Species Network. Australia's Cooperative Research Centre (CRC) for Weed Management has linkages in the Asia-Pacific region, southern Africa, the USA and Europe. The CRC for the Biological Control of Pest Animals Control cooperates with France, New Zealand, the USA and the UK.

Developing capacity to use risk assessment to address threats of invasive alien species to biodiversity and incorporate such methodologies in environmental impact assessment (EIA) and strategic environmental assessment (SEA)

123. Only a few Parties (5%) have comprehensive activities underway while some countries (28%) are undertaking some activities in this regard. Some Parties (38%) have not developed capacity for risk assessment to address threats of IAS. Some Parties (29%) have not developed capacity for risk assessments but relevant programmes are under development. Many industrialized countries have undertaken various activities to develop capacity for risk assessments, however countries with economies in transition need to do more in this regard. According to comments provided, it appears that risk assessments are more commonly conducted on plants than on other taxonomic groups. An example of risk assessment undertaken for plants is a national risk assessment of weeds on Australia's productivity and environment. Several Parties mentioned the International Plant Protection Convention (IPPC): China has been conducting risk assessments for IAS in accordance with principles of IPPC. Thailand also conducts a risk assessment in collaboration with the IPPC Secretariat. The Bahamas is using models developed out of the Western Australian Weed Risk Assessment, which is widely used in the South Pacific. A few Parties mentioned phytosanitary measures for risk assessment: Germany has established a phytosanitary risk analysis system that is independent of environmental impact assessment and SEA.

Development of financial measures and other policies and tools to promote activities to reduce the threats of invasive species

124. Many Parties (41%) have some measures, policies and tools in place to promote activities to reduce the threats of IAS and only one Party has comprehensive measures and tools in place. Some Parties (37%) have not developed financial measures, policies and tools and some Parties (22%) have measures and policies under development. Many industrialized countries have some financial measures, policies and tools in place, however, many countries with economies in transition are yet to develop measures, policies or tools to address IAS. Many developing countries are developing measures and policies in this regard.

125. Many Parties mentioned government institutions and departments as being responsible for funding IAS projects and creating laws to reduce their threats. The Australian Natural Heritage Trust develops and implements actions to reduce the impact of feral animals on the environment and also funds the "Defeating the Weed Menace Programme". In Belgium, government subsidies are given to land owners and local authorities for the use of endemic shrubs and trees and removal of exotic species. The European Community, through the Nature component of the LIFE programme, has funded over 100

projects on management of IAS (1992-2002). However, these projects are mostly local and small-scale. Chile is the only country that has put comprehensive measures and policies in place. Chile states that the National Policy for Invading Exotic Species is being created and that collaboration exists with international programmes such as Globallast and GISP. Public funds have been made available for a pilot project to control beaver and mink, agricultural and forest invasions, as well as animal diseases.

Overall assessment of progress and challenges

126. Areas where 50% of Parties or more report progress is being made include: regional and/or subregional cooperation; and the use of the ecosystem, precautionary and biogeographical approaches.

127. Areas where less than 50% of Parties report some progress is being made include: creating mechanisms for international cooperation and multilateral cooperation; identifying IAS species with a tracking system in place; identifying needs and priorities for the implementation of the Guiding Principles; creating mechanisms for cooperation between sectors; collaborating with trading partners and neighboring countries to address threats of IAS; and developing financial measures, policies and tools to promote activities to reduce the threats of IAS.

128. Areas where only a few Parties indicated some developments are ongoing include: assessing risks posed to ecosystems, habitats or species by most IAS (most Parties have for some IAS); undertaking comprehensive measures to prevent the introduction of, control or eradicate IAS (most Parties have some measures); establishing mechanisms to coordinate national programmes for applying the Guiding Principles; reviewing, adjusting and developing policies, legislation and institutions in the light of the Guiding Principles; and developing capacity to use risk assessment to address threats of IAS and incorporating methods into EIA and SEA.

129. The main obstacles to prevention, management, control and eradication of IAS include lack of a comprehensive IAS strategy; lack of relevant information and knowledge; lack of intersectoral coordination and lack of financial, human and technical resources and capacities.

Article 8 (j) and related provisions

Introduction

130. The Conference of the Parties decided at its fourth meeting to establish a working group to address issues concerning Article 8(j) and related provisions. The Working Group has had five meetings so far. Based on the recommendation of the working group, the Conference of the Parties, in its decision V/16, adopted a work programme on Article 8(j) and related provisions, which is divided into two phases according to the priority assigned to the tasks therein. The seventh meeting of the Conference of the Parties, in its decision VII/16, also adopted the Akwé: Kon Voluntary Guidelines.

131. In the third national report, Parties were asked to report primarily on the status and trends regarding the traditional knowledge of indigenous and local communities, the Akwé: Kon Guidelines, capacity-building and participation of indigenous and local communities, support to implementation, and GURTs.

Synthesis of responses and comments

Support to indigenous and local communities in undertaking field studies to determine the status, trends and threats related to the knowledge, innovations and practices of indigenous and local communities

132. Only some countries (27%) have stated that they have supported indigenous and local communities (ILCs) in undertaking field studies to determine the status, trends and threats related to the

knowledge, innovations and practices of ILCs. Almost half of reporting countries have not supported ILCs in such endeavors. Some (23%) stated that they are considering providing support to ILCs. Austria, Belgium and Germany report that they have provided some financial and technical support to developing countries in undertaking relevant activities.

133. Saint Lucia has funded meetings to determine the status, trends and threats related to knowledge, innovations and practices of ILCs. These meetings were instrumental in facilitating the formation of groups and enquiring into their concerns. In order to institutionalize the biodiversity documentation process at a local level, Nepal has constituted District Biodiversity Committees in ten districts. Such committees will be established in all 75 districts to facilitate documenting traditional knowledge, skill, technique and practices. India, under its 2002 Biological Diversity Act, has encouraged the involvement of ILCs and supported them in conducting studies related to knowledge, innovations and practices through the preparation of the People's Biodiversity Registers, among other projects.

134. China has surveyed traditional knowledge, innovation and practices in some areas. In the Yunnan Province, a database of indigenous experts having indigenous knowledge on wild animals and plants and forest management has been established. Through implementing a project for the collection and conservation of specimens of Chinese herbal medicines, as well as medicines used by minorities, a database and atlas of herbs and other medicinal resources has been established. France has supported initiatives in its territories and has produced significant literature concerning traditional medicine. Mauritania has also conducted studies relating to traditional knowledge of coastal ILCs.

Development of capacity-building programs to involve and enable smallholder farmers, indigenous and local communities, and other relevant stakeholders to effectively participate in decision-making processes related to genetic use restriction technologies

135. No countries have comprehensive programmes in place. Only nine countries have some programmes in place. Over two-thirds of reporting countries do not have any programmes and a quarter are currently developing some.

136. In Jordan, an agro-biodiversity project is being implemented which focuses on developing a sustainable approach that includes participation, training and capacity-building of farmers in the use of plant genetic resources for income generating small enterprises. This approach involved local communities in the decision-making process from planning to evaluation and impact assessment.

137. In Romania, although no programs have been developed, there are ordinances and laws that include procedures for public consultations, allowing local communities and small farmers to express their point of view regarding specific genetic technologies. There is also a notification procedure for local communities for promoting a variety of restrictive genetic techniques. In Tunisia, programs enable capacity-building to allow small farmers who are not adapted to modern intensive practices, to maintain and value sustainable systems of production from local resources. This enables participation of farmers in decision-making processes related to GURTs. Cameroon has involved small farmer cooperatives in relevant decision-making processes by putting their representatives in the NABIC. Furthermore, some countries offer educational programs concerning GURTS to farmers. Some mechanisms for rural participation in decision-making also exist in a few countries.

Initiation of a legal and institutional review of matters related to cultural, environmental and social impact assessment, with a view to incorporating the Akwé: Kon Guidelines into national legislation, policies, and procedures

138. Most countries (77%) stated that they have not initiated a review related to the incorporation of the Akwé: Kon Guidelines. A few others stated that a review is under way. Even fewer have

undertaken such a review. The environmental impact assessment legislation of Mali takes into account the Guidelines. Trinidad and Tobago and Zimbabwe have also incorporated the Guidelines to some extent. Niue, Jordan, Nepal, France, Norway and Uganda stated that their national environmental impact assessment legislations have already taken some principles into account.

Use of the Akwé: Kon Guidelines in any project proposed to take place on sacred sites and/or land and waters traditionally occupied by indigenous and local communities

139. Most countries (77%) stated that they did not use the Guidelines in any project proposed to take place on sacred sites and/or land and waters traditionally occupied by indigenous and local communities. Some stated that they had used the Guidelines to some extent. The Manantali and Selingue dams projects of Mali took into account the Guidelines. In Uganda, not only have the Guidelines been incorporated into environmental impact assessment regulations, they have also been considered in the development of projects such as the hydropower station at Budhaghali (Bujjagali) falls. The Guidelines have been referred to, among others, in developing Malaysia's national legal framework on Access and Benefit Sharing.

Establishment of national, subregional and/or regional indigenous and local community biodiversity advisory committees

140. More than half the countries stated that they have not established such advisory committees. A few stated that establishment of such committees was under way. Approximately 37% of countries indicated that they had established such committees.

Assisting indigenous and local community organizations to hold regional meetings to discuss the outcomes of the decisions of the Conference of the Parties and to prepare for meetings under the Convention

141. Most countries (82%) stated that they have not provided such assistance. However, fifteen countries have organized meetings, consultations or workshops. Mauritania, Morocco, Sweden, Zimbabwe and Cote d'Ivoire have held either regional or national workshops, while Malawi and Botswana held local meetings to discuss the issues.

142. For instance, in Niger, community representatives are members of the National Commission on Biodiversity and thus participate in meetings organized by the focal point. The Philippines have institutionalized the participation of civil society, including ILCs, in the creation of the Philippine Council for Sustainable Development, which has a sub-committee on biodiversity. In Moldova, conferences are organized through NGOs and are supported financially by local and national Ecological Funds. Sweden has a policy to involve representatives of the Saami population in international negotiations that concern article 8(j) and has also supported participation in the ministerial meeting of the Arctic Council.

Measures to enhance and strengthen the capacity of indigenous and local communities to be effectively involved in decision-making related to the use of their traditional knowledge, innovations and practices relevant to the conservation and sustainable use of biodiversity

143. More than half the Parties (62%) have undertaken some or comprehensive measures to enhance and strengthen such capacity. Participation of ILCs in national decision-making processes through various means and channels has been reported by some (20-25%) reporting Parties. The most popular means of enhancing and strengthening capacity were education (through workshops or otherwise), national funding for local projects, implementation of participatory processes in planning and other projects, awareness-raising and information dissemination. The creation of local NGOs or associations

and community-steered projects has also achieved some success. A few countries stated that power was being transferred to the local level through decentralization processes.

144. Principles of self-delineation, relating to identification and delineation of ancestral lands, have been integrated in the Indigenous Peoples Rights Act of the Philippines. Within the framework of ancestral domains, ILCs may undertake resource management and elaborate sustainable development and protection plans. Guidelines have also been issued in relation to free and prior informed consent for access to genetic resources in the domains of indigenous communities.

145. Brazil has taken several steps to build or strengthen capacity of ILCs to be effectively involved in decision-making. The capacity-building project “Access to Genetic Heritage and Associated Traditional Knowledge” aims to disseminate information and promote better understanding of national legislation and the CBD, where access to genetic heritage and associated knowledge are concerned. Several other initiatives involving dissemination of knowledge in various areas of the country have been undertaken either by the government or by NGOs.

146. Through the Ethiopian Dynamic Farmer-Based Approach to the Conservation of Ethiopia’s Plant Genetic Resources, training has been offered to farmers, with the aim of enabling farmers to distinctly realize their role and the role of their traditional systems in conservation and sustainable use of biodiversity. One of the principles of the project is the obligatory use and application of the respective local community’s traditional knowledge, innovations and practices relevant to the conservation and sustainable use of biodiversity, while establishing *in-situ* conservation sites on farms across the country.

Development of appropriate mechanisms, guidelines, legislation or other initiatives to foster and promote the effective participation of indigenous and local communities in decision making, policy planning and development and implementation of the conservation and sustainable use of biodiversity at international, regional, subregional, national and local levels

147. More than half of Parties stated that they have some mechanisms, guidelines and legislation in place. About a quarter indicated that they do not have any such mechanisms, guidelines and legislation. The rest indicated that development of such mechanisms and legislations is under way. However, it appears that in most of those countries, such mechanisms, guidelines or legislation are designed for the public in general, without particular provisions for ILCs.

148. Australia is one country that provides special initiatives for ILCs in particular. The Indigenous Advisory Committee has been established to advise the Minister for the Environment and Heritage on the operation of the EPBC Act, taking into account the significance of Indigenous peoples’ knowledge of land management and the conservation and sustainable use of biodiversity. All members of the committee are indigenous Australians. Membership is based on expertise in indigenous land management, conservation and cultural heritage management, and not on particular representation of a region or organization. Similarly, Sea Country Plans have been developed to facilitate the involvement of indigenous communities in marine management at a cultural and geographic scale that is effective and relevant for the communities.

149. Canada has also been very active in involving ILCs at all levels of government. One mechanism of participation is the establishment of co-management boards as a result of land claims agreement processes. These boards have played a major role in shaping and developing traditional knowledge and in campaigning for its recognition. Co-management regimes now relate to wildlife, lands, waters, environmental impact assessment and planning. Another example is the First Nations Forestry Program, a joint national and provincial/territorial initiative between Natural Resources Canada and Indian and Northern Affairs Canada. One of its main objectives is to enhance the capacity of First Nations to sustainably manage their forest lands. Many other initiatives are also successfully in place.

150. Community-based forestry management is also in place in Malawi. Malawi has also developed a strategy for the decentralization of environmental management, which includes participation of local communities in decision-making through Village Development Committees. Political decentralization has also had an impact on local resource management in Mali.

151. Participation of local communities is also given high priority in Kenya where local communities have been involved in developing management plans for some degraded ecosystems such as Lakes Nakuru, Naivasha, Bogoria and Olbollosat, Saiwa swamp, fourteen falls and the marine protected areas and other coastal sites. They are also involved in developing management plans for wetlands. Furthermore, a draft Strategy and Action Plan Towards Mainstreaming Indigenous Knowledge in Kenya has been developed. In Brazil, the decree that establishes the principles and directives for the implementation of the National Biodiversity Policy includes the participation of ILCs in the decision-making process concerning their interests. Finally, in Nepal, the Local Self Governance Act empowers local bodies to manage and use natural resources, collect revenue, generate funds and utilize them in resource management within their working area.

Development of mechanisms for promoting the full and effective participation of indigenous and local communities with specific provisions for the full, active and effective participation of women in all elements of the program of work

152. Over a third of countries have put in place such mechanisms. However, a slightly larger portion (40%) of the countries have not developed any such mechanisms. Some countries are in the process of developing such mechanisms. However, most countries that answered positively referred to their national policies for general gender equality, and not to measures for women of ILCs in particular. The following examples illustrate policies specifically targeting women in ILCs.

153. In 1971, Canada established the Aboriginal Women's Program to enable women to influence policies, programs, legislation and decision-making that affect their social, cultural, economic and political well-being within their communities and Canadian society. The Canadian government will provide \$5 million over a period of five years (2005-2010) to the Native Women's Association of Canada to help fund implementation of some of its proposals.

154. In Nepal, policies have been initiated to maintain gender balance and empower women of ILCs to enhance their participation in all types of national development activities. For instance, their access to saving and credit programs has been facilitated. Efforts are also being made to support women of ILCs in managing forests and implementing soil and water conservation activities through the formation of women community user groups. It has been reported that approximately 24% of the total number of community forestry user groups are comprised exclusively of women.

Financial and other support to indigenous and local communities in formulating their own community development and biodiversity conservation plans that will enable such communities to adopt a culturally appropriate strategic, integrated and phased approach to their development needs in line with community goals and objectives

155. A little over one third (36%) of reporting Parties have not supported ILCs in formulating their own community development and biodiversity conservation plans. However, nearly half of the reporting Parties stated that they have supported ILCs to some extent. A number of countries (15) stated that they have provided support to a significant extent. Financial and/or technical support was provided by national governments, foreign governments and NGOs.

156. Canada is currently piloting a new Reserve Land and Environment Management Program (RLEMP) which includes criteria that will enable First Nations communities to better develop and sustain land, natural resources and environmental management expertise. India has funded and supported

the preparation of the People's Biodiversity Registers by the Indian Institute of Science. These registers aim to build an open and transparent information system on biodiversity resources from the local level upwards.

157. Funding has also been provided by governments in developing countries to their ILCs. In Lebanon, financial support to ILCs flows from the annual funds provided by the Ministry of the Environment to local NGOs for activities and projects related to biodiversity. In Mali, support has been provided to some communities in the elaboration of their community action plans. Additionally, funding is available for environmental projects initiated by communes for up to 90% of the cost of the project. Finally, the Senegalese government offers technical and financial support to local communities for the elaboration of their community development plans. NGOs have been active in offering support for the elaboration of community development plans in Malawi, South Africa and Swaziland.

Overall assessment of achievements and challenges

158. Overall, the implementation of Article 8(j) and related provisions requires more efforts and support. Support to the efforts to determine the status and trends of traditional knowledge, innovations and practices of indigenous and local communities is still lacking in many countries, though some countries have recognized the importance of traditional knowledge of indigenous and local communities to biodiversity conservation and sustainable use. The Awke Kon Guidelines remain at a very early stage of implementation since few countries have reviewed their related policies and legislations in light of the guidelines and made proper adjustments. Nevertheless, it is somewhat encouraging to note that some countries have developed and are implementing some policies and legislations that are consistent in principle with some aspects of the Awke Kon Guidelines. In regard to mechanisms of participation of indigenous and local communities in relevant decision-making processes, it seems that some countries have put in place policies, laws and mechanisms that encourage this. However, it seems unclear to what extent these mechanisms have been implemented. A similar situation appears to exist in regard to the participation of women of indigenous and local communities in relevant decision-making processes and activities. More financial support to indigenous and local communities for developing their own community plans is needed since many countries indicated that such support was limited.

159. Noted constraints encountered in implementation included:

- Institutional weaknesses,
- Lack of intersectoral coordination or horizontal cooperation,
- Lack of human capacity and financial resources,
- Increased demand for natural resources,
- Scarcity of documentation on ILCs and the status of their knowledge,
- Poverty of ILCs which leads them to abandon their traditional lifestyle,
- Lack of public awareness and education,
- Limited political support.

Ex-situ conservation (Article 9)

Introduction

160. To date, the Conference of the Parties has not specifically considered Article 9 on *ex-situ* conservation, however, relevant issues have arisen in the consideration of other agenda items, such as taxonomy and ABS. In decision III/10, the Conference of the Parties recommended to Parties that they explore ways to make taxonomic information housed in collections worldwide readily available, in particular to countries of origin. The Conference of the Parties subsequently adopted two wide-ranging decisions on taxonomy, which include a number of elements of relevance to *ex-situ* conservation. The Conference of the Parties has initiated an information-gathering exercise as part of its work on access to

genetic resources and benefit-sharing on *ex-situ* collections acquired prior to the entry into force of the Convention, and not addressed by the Commission on Plant Genetic Resources for Food and Agriculture.

161. In the third national report, Parties were asked to report on measures for *ex-situ* conservation of biodiversity components native to and/or originating outside the country, the reintroduction of threatened species and regulating and managing the collection of biological resources from natural habitats for *ex-situ* conservation.

Synthesis of responses and comments

162. *Measures for the ex situ conservation of biodiversity components native to and originating outside the country:* Most countries (85%) have put in place some measures, with over a dozen of countries having comprehensive measures in place. A few countries indicated that such measures are under development and only a few countries said that no such measures are in place. Many countries have developed programmes or projects for *ex-situ* conservation primarily of those threatened species. Ways and means they employ for *ex-situ* conservation are primarily through establishment of gene/germplasm/DNA banks, botanical gardens, zoos, artificial breeding or culturing/propagation facilities, herbaria, arboreta, captive maintenance and in vitro conservation. A number of countries or regions have developed legislations addressing *ex-situ* conservation of threatened species. For example, the EU adopted the Zoos Directive specifically to require member states to adopt measures for *ex-situ* conservation. A number of countries have initiated collective efforts for *ex-situ* conservation. For example, Nordic countries have established a Nordic Genebank for *ex-situ* conservation of seed producing species and coordinating the preservation of clonally propagated species. The UK, together than 40 partner organizations in 17 other countries, has established the Millennium Seed Bank, which works towards the *ex-situ* conservation of 24,200 species of plants by 2010.

163. *Measures for the reintroduction of threatened species into their natural habitats under appropriate conditions:* Most countries (73%) have adopted some measures for the reintroduction of threatened species into their natural habitats. A few countries have adopted comprehensive measures in this regard. A number of countries (22%) are developing or are yet to develop such measures. From detailed information provided, reintroduction programmes implemented by many countries are limited in scale, primarily focusing on those threatened or locally extinct species. Methods often employed by many countries are primarily propagation, captive breeding and wild training, using botanical gardens and zoos. The Recovery of National Endangered Wildlife (RENEW) in Canada has been instrumental in establishing captive breeding and reintroduction programs for endangered species native to Canada, primarily through Canadian zoos and focusing on those species or populations that have been designated as extirpated, endangered or threatened. South African National Park has run a successful reintroduction programme for many years, which focuses not only on threatened species, but aims to reintroduce species into new conservation areas. South Africa has also translocated or reintroduced large mammals, such as elephant, rhinoceros, various antelope species and zebra, into their natural habitats. A number of countries also indicated that their reintroduction programmes have not been entirely successful and that monitoring following reintroduction is also lacking.

164. *Measures to regulate and manage the collection of biological resources from natural habitats for ex situ conservation purposes so as not to threaten ecosystems and in situ populations of species:* Many countries (55%) have taken some measures in this regard, with over a dozen of countries having implemented comprehensive measures. About 15% of countries are developing such measures and a few more countries are yet to develop measures for this purpose. Many countries reported that they had adopted legislations or various administrative rules or orders to regulate and manage the collection or relocation of species from their natural habitats. Some countries' laws or rules for access to genetic resources contain provisions regulating collection or relocation of species from natural habitats, in particular protected areas. Some countries have put bans on such activities except when special permission or licences are awarded. Some countries have developed guidelines for such collection

activities. Some countries have established institutions to regulate, manage and monitor such activities. A number of countries are implementing the CITES in order to prevent illegal collection and trade of wild animals and plants, in particular those included in the CITES Annexes.

Overall assessment of achievements and challenges

165. Many countries have put in place various measures for *ex-situ* conservation, primarily through establishing botanical gardens, zoos, gene/germplasm banks, museum/herbaria/arborescences collections and various breeding facilities. Many countries have also developed reintroduction programmes for those endangered or locally extinct species, but it is not clear how successful these programmes are. Many countries are strict in regard to the collection or relocation of species from their natural species by putting in place various legislations and administrative orders, including bans and special permits.

166. Main challenges identified by many countries for implementing this Article include:

- Inadequate capacities;
- Lack of financial, technical and human resources;
- Lack of research and information;
- Lack of economic incentives;
- Lack of coordination among relevant sectors;
- Lack of legal and policy frameworks and weak law enforcement;
- Lack of investment in relevant *ex-situ* facilities;
- Pressure from population growth and poverty.

Sustainable Use (Article 10)

Introduction

167. The Conference of the Parties adopted at its fifth meeting sustainable use as a cross-cutting issue (decision V/24) as well as considered the relationship of biodiversity and tourism in the context of sustainable use. The seventh meeting of the Conference of the Parties adopted the Addis Ababa Principles and Guidelines for Sustainable Use, based on the work of a number of regional workshops held prior to the seventh meeting.

168. In the third national report, Parties were asked to report on integration of sustainable use into national decision-making, measures for sustainable use of biological resources, development of sustainable use policies and programmes, involvement of the private sector and the application of the Addis Ababa Principles and Guidelines.

Synthesis of responses and comments

169. Integration of consideration of sustainable use of biological resources into national decision-making: Most Parties (86%) indicated that they had considered sustainable use of biological resources in developing relevant strategies and plans. The difference is that most of these Parties (68) had done so in some relevant sectors while the rest (38) in most relevant sectors. From the detailed information provided, many countries have integrated sustainable use of biological resources into sectors like agriculture, forestry, fishery, and tourism. A considerable number of countries have integrated sustainable use of biological resources into cross-sectoral or broader strategies and plans, such as NBSAPs, strategies for sustainable development and poverty reduction as well as national environmental plans or strategies. Some countries reported that such integration had been done in relevant legislations, such as environmental laws and legislations related to conservation and sustainable use of natural resources or biodiversity.

170. Measures relating to the use of biological resources that avoid or minimize adverse impacts on biological diversity: Nearly all reporting Parties (91%) have put in place measures relating to the use of biological resources that avoid or minimize adverse impacts on biodiversity, with most of them (84) having taken some measures while some (23) having adopted comprehensive measures. Specifically, many countries have adopted relevant legislations, clearly stipulating that sustainable use should be the principle that should be followed for use and management of biological resources. Some countries have developed and are implementing some policies and programmes to this end, such as eco-tourism development plans, fishery and forest management plans and programmes. Many countries are trying to avoid or minimize impacts of the use of biological resources on biodiversity primarily through requiring and implementing environmental impact assessments and licensing systems. Some countries have put in place a monitoring system to ensure that users of biological resources are taking proper measures to avoid or minimize impacts on biodiversity. Some countries are also trying to achieve this through involving relevant local and indigenous communities, which play a crucial role in ensuring their use of biological resources will avoid or minimize impacts on biodiversity.

171. *Measures that protect and encourage customary use of biological resources that is compatible with conservation or sustainable use requirements:* Most Parties (73%) reported that some or comprehensive measures were in place to protect and encourage customary use of biological resources. Some countries had adopted policies or regulations that encourage customary use. Many countries encouraged local and indigenous communities to use their customary approaches for conservation and sustainable use of biodiversity, providing them assistance through developing relevant programmes, establishing networks and setting up some mechanisms at local level. For example, the Swiss Landscape Concept encourages farmers to contribute to conservation or restoration of natural environment by compensating for their traditional, environmentally friendly farming practices. A few countries promote customary use of biodiversity resources through promoting eco-farming, eco-tourism and relevant educational and awareness programmes and activities. A few countries encourage the use of customary approaches for management of protected areas, ecosystems and natural resources, which are compatible with conservation and sustainable use requirements. To those practices that are not compatible with conservation or sustainable use requirements, some countries have adopted some regulatory mechanisms or systems to regulate or prevent them.

172. *Measures that help local populations develop and implement remedial action in degraded areas:* Most Parties (81%) have put in place some measures in this regard, with a few having taken comprehensive measures. These measures include establishing community-based programmes; developing policies and incentives to encourage remedial actions in degraded areas; providing funds or subsidies to the affected communities or people to help with their rehabilitation or restoration programmes; limiting or banning certain practices that cause degradation or damages to areas where biodiversity is reduced; adopting integrated technologies for rehabilitation or restoration; afforestation and forest management programmes; and providing training to local communities.

173. Identification of indicators and incentive measures for sectors relevant to the conservation and sustainable use of biodiversity: Some Parties (40%) have developed some indicators and incentive measures while the remaining Parties are developing or considering developing such tools and measures. In terms of indicators, some Parties have developed or are developing environmental and/or sustainable development indicators which cover biodiversity. Some countries have developed and are using some indicators developed for sectors relevant to conservation and sustainable use of biodiversity, such as forestry, agriculture, wetland ecosystems, fishery and protected areas. Many countries have adopted some incentive measures for conservation and sustainable use, which vary from country to country. In general, incentive measures are financial in some countries. These include funds provided to local communities and/or land owners for their activities to protect biodiversity, grants of land use and natural resources rights, financial compensations for land use for biodiversity conservation, revenue sharing and provision of preferential credits for conservation-related activities. Some incentive measures are non-financial and supportive, such as awards to those involved in conservation activities, collaborative

mechanisms for management of natural resources, stewardship programmes that encourage landowners to set aside their land for conservation in exchange for assistance provided by governments, free provision of seedlings for afforestation and tendering arranged for undertaking eco-tourism activities. A few countries such as Uganda have incorporated such incentives into their laws and sectoral plans. For example, Uganda in its Constitution and Land Act as well as its Forestry Plan has recognized the rights of its citizens to own not only land but also the natural resources on it. A landowner who owns forest on his land is paid directly by anyone interested in harvesting forest resources from the land while the landowner can use them freely as long as it is within the law to ensure sustainable harvesting. Further details concerning incentive measures for conservation and sustainable use of biodiversity can be found in the synthesis of Article 11 below.

174. Implementation of sustainable use practices, programmes and policies for the sustainable use of biological diversity, in particular in pursuit of poverty alleviation: Many reporting countries (61%) have put in place some programmes and policies while 17 countries have adopted comprehensive programmes in this regard. Some countries indicated that some of their policies and programmes, in particular sustainable development strategies and biodiversity-related sectoral policies and plans, have integrated the concept and practices of sustainable use of biodiversity. A considerable number of developing countries and countries with economies in transition stressed that their policies and programmes related to sustainable use have strong links to poverty reduction and some projects are being implemented to this end. Many developed countries also stressed that their international development cooperation or overseas assistance programmes have strong links to poverty reduction, sustainable development and sustainable use of natural resources. Some developed countries use these links as one of the key principles for undertaking international development cooperation.

175. *Development or exploration of mechanisms to involve the private sector in initiatives on the sustainable use of biodiversity:* Nearly half of countries reported that such mechanisms are in place. From the detailed information provided by Parties, it seems that developed countries had put in place more specific mechanisms in this regard. Though specific mechanisms are yet to be developed, some countries indicated that their related policies and laws encourage the participation of the private sector in the initiatives and activities related to the sustainable use of biodiversity. In terms of specific participatory mechanisms, some countries directly involve the private sector in the management and use of natural resources, such as fishery and forests, through granting them the rights of management while requiring them through quota and/or licensing systems to ensure sustainable use. Some countries provide opportunities to the private sector to contribute to sustainable use, such as involving them in eco-tourism development. Some countries encourage private-sector involvement through involving them in decision-making processes related to the sustainable use of biodiversity. Certification of products and activities of the private sector is one of the means or incentives employed by some countries to promote private-sector involvement. In some countries, the private sector took the initiatives on its own for sustainable use of biodiversity. For example, a majority of fishermen and fishing organizations in Canada developed and implemented the Canadian Code of Conduct for Responsible Fishing Operation to achieve sustainable, conservation-based commercial fisheries across the country.

176. *Application of the Addis Ababa Principles:* Nearly 50% of reporting countries have not yet started the implementation of the Addis Ababa Principles, and 26% of countries are reviewing the Principles. Part of the reason may be related to the fact that these principles were only recently adopted at the seventh meeting of the Conference of the Parties. However, a number of countries indicated that they had incorporated some key principles into their national biodiversity strategies and action plans, sustainable development strategies and some related sectoral plans and policies. A few countries also indicated that some principles are being reviewed and would be taken into account or used in developing their related policies and laws.

177. *Initiative or action to develop and transfer technologies and provide financial resources to assist in the application of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity:* A number of developed countries indicated that their international development cooperation programmes and overseas assistance programmes had included technical assistance and financial resources to developing countries to help them promote sustainable use of biodiversity. For example, in 1995, Canada converted its official development assistance debt of Costa Rica into an environmental fund, part of which was used to promote ecologically sustainable land use in an important watershed of Costa Rica and finance community-based environmental projects. Costa Rica's ODA debt to Canada was forgiven in 2000 due to its successful fulfilment of the obligations under this debt conversion initiative.

Overall assessment of achievements and challenges

178. It seems clear that many Parties have recognized the importance of sustainable use of biodiversity and are taking some measures towards this direction. Many countries indicated that sustainable use had been taken into account or integrated in developing relevant strategies and plans, including NBSAPs, sustainable development strategies and some related sectoral plans. Nearly all countries are implementing some measures to avoid or minimize impacts of the use of natural resources on biodiversity, however, it seems unclear how effective these measures are in achieving this purpose. Many countries encourage the customary use of biological resources that is compatible with conservation and sustainable use requirements, however, more measures are yet to be developed to put it into practice. Some countries have put in place some incentive measures, both financial and non-financial, to promote the sustainable use of biodiversity. Development of indicators to measure sustainable use seems to be still in the early stage in many countries.

179. Institutional weakness and the lack of human and financial capacity are mentioned by many countries as a major impediment in implementing Article 10, in particular by developing countries. This is reflected in poor regulations and management systems for policy implementation, as well as poor inter-departmental coordination leading to a lack of inter-sectoral integration and mainstreaming of biodiversity considerations. Lack of awareness and the persistence of attitudes that neglect the critical contribution of components of biodiversity to human well-being were also mentioned. Other challenges identified by some Parties include:

- Institutional weakness and inadequate capacity;
- Lack of Ecosystem Approach for management;
- Lack of effective regulatory and management systems and law enforcement;
- Lack of economic incentive measures;
- Lack of benefit-sharing mechanisms or arrangements;
- Lack of research, information and knowledge on conservation values.

Biodiversity and sustainable tourism

Synthesis of responses and comments

180. *Mechanisms to assess, monitor and measure impact of tourism on biodiversity:* 43% of reporting countries had put such mechanisms in place while the rest are either developing such mechanisms or are yet to put such mechanisms in place. A number of countries indicated that they had developed regulatory systems or sectoral strategies and policies to ensure that impacts of tourism on biodiversity will be minimized. Some countries had required such impact assessment as a part of their laws and practices of environmental impact assessment. Many countries had put in place systems to monitor impacts of tourism on biodiversity. A few countries had done some surveys to provide a basis for policy or decision-making related to biodiversity-friendly tourism development. Some countries had taken some specific measures to minimize tourism impacts on biodiversity, such as control number of tourists, establishment of checkpoints to ensure tourists will not damage biodiversity and providing education and

awareness programmes to tourists and tourism operators. Some countries had undertaken or are undertaking research projects on tourism impacts on biodiversity though a systematic mechanism is not in place yet. A few countries indicated that they would take into consideration tourism impact on biodiversity while planning tourism development. A few countries are implementing some very strict measures to ensure minimal impacts of tourism on biodiversity-rich areas or protected areas. For example, Australia is implementing a restrictive quarantine-based permit system to visitors to partly inhabited and uninhabited conserves managed by the Australian Government.

181. *Educational and training programmes to the tourism operators to increase their awareness of the impacts of tourism on biodiversity and upgrade the local technical capacity to minimize the impacts:* Less than a half of reporting countries have developed such programmes. It seems that many countries have provided training courses to tourism operators, tour guides and conservation managers through various means, including training workshops and university or college courses. Some have developed toolkits like handbooks, guides and brochures to provide tourism operators and tour guides with knowledge and practices related to minimizing impacts of tourism on biodiversity. Some countries encourage tourism operators to adopt biodiversity- friendly tourism practices through ecological certification or labelling programmes. Some countries have developed strategies and plans for eco-tourism development by incorporating concepts of sustainable use.

182. *Provision of capacity-building and financial resources to indigenous and local communities to support their participation in tourism policy making, development planning and product development and management:* Many countries (49%) have put in place some programmes or projects. In providing detailed information in this regard, many countries mentioned projects that had involved indigenous and local communities in eco-tourism development, protected areas management and ecosystems management. Through these programmes and projects, training activities were organized for indigenous and local communities to strengthen their capacities or skills for tourism management and conservation and sustainable use of natural resources. Some countries involved indigenous and local communities in the process of developing policies related to tourism development and natural resources management. Some countries had developed policy frameworks that allow indigenous and local communities to participate in relevant processes. A few developed countries provided such support to indigenous and local communities through their international development cooperation. It seems that many countries are yet to develop financial support mechanisms for the participation of indigenous and local communities in relevant processes.

183. *Integration of the Guidelines for Biodiversity and Tourism Development in the development or review of national strategies and plans for tourism development, NBSAPs, and other related sectoral strategies:* Some countries (36%) indicated that a few principles of sustainable development and sustainable tourism had been integrated into relevant sectoral plans and NBSAPs, including strategies for tourism development. However, it seems unclear what principles and suggestions identified in the CBD Guidelines for Biodiversity and Tourism Development have been incorporated into these strategies and policies. A few countries indicated that impact assessment and management aspects had been considered and incorporated while formulating tourism development strategies. A few countries reported that most principles of the Guidelines had been integrated into their sectoral strategies and plans and NBSAPs, in particular eco-tourism development plans.

Overall assessment of progress and challenges

184. Overall, many countries have recognized the importance of addressing tourism impacts on biodiversity and put in place some measures or programmes to this end, however, clearly more efforts are needed by many countries to ensure sustainable or biodiversity-friendly development of tourism. The application of the Guidelines for Biodiversity and Tourism Development is still in the initial stage in many countries. Enhanced integration of nature and biodiversity conservation issues into tourism

legislation as well as policy and strategic planning documents is identified as a major challenge, as well as to build cooperation between governmental institutions, municipalities, tourism organizations and NGOs. A need is also identified for the development of training and education programmes as well as for the development of programmes for tourism management in protected areas and/or environmentally sensitive areas.

Incentive Measures (Article 11)

Introduction

185. Guidance on implementing this Article was already provided by the Conference of the Parties at its third and fourth meetings (see decisions III/18 and IV/10 A). A programme of work on incentive measures was adopted by the Conference of the Parties at its fifth meeting (decision V/15). The Conference of the Parties at its sixth meeting endorsed proposals for the design and implementation of incentive measures, as well as recommendations for further cooperation on incentive measures, as far as they are consistent with Parties' national policies and legislation as well as their international obligations (decision VI/15).

186. In the third national report, Parties were asked to report on establishment of programmes to identify and adopt incentive measures, incorporation of biodiversity values into relevant strategies, policies and plans, and the use of the proposals for design and implementation of incentive measures.

Synthesis of responses and comments

Establishment of programmes to identify and adopt incentive measures

187. 68 Parties indicated that some programmes were in place and 11 Parties claimed to have comprehensive programmes in place. 22 Parties said that their programmes were being developed and 16 Parties have no such programmes in place.

188. Many countries provided information on the application of positive incentive measures, on monetary positive incentive measures as well as on non-monetary positive incentive measures. Some countries also provided information on the application of negative incentive measures or disincentives. Some Parties described measures that relate to the creation of markets for biodiversity-based goods or services or provided information on valuation of biodiversity and biodiversity resources and functions. A number of Parties (with some but not complete overlap) also reported on the incorporation of biodiversity values of biological diversity into relevant plans, policies and programmes.

Positive incentive measures

189. In a range of monetary positive incentive measures, measures associated with agriculture featured most prominently (16 EU Member States referred to national implementation of the EU rural development programme). A few more countries also referred to measures which may be also related to agriculture (agreements/covenants/easements on private land and land set-aside schemes, stewardship payments). Some countries referred to the application of incentive measures in the context of protected area management, which may also relate to agriculture. In addition to agriculture, some countries provided examples or cases of positive measures developed for forestry and other sectors.

190. A number of components or sub-programmes of the different national agri-environmental programmes seem to have common objectives. For instance, Parties from different CBD regions mentioned the provision of financial and technical assistance to farmers in order to promote biodiversity-friendly production techniques, or to promote the preservation of rare breeds. But important differences can sometimes also be detected. For instance, while Canada reported on a provincial programme which

helps converting marginal lands under cultivation to permanent forage or tree cover, Austria reported that its national agri-environmental programme plays an important role in supporting farming in marginal areas which are prone to abandonment, in particular in mountain farming, which would play a vital key role in safeguarding the sensitive ecosystem of mountain areas.

191. As regards the vehicles by which monetary positive incentive measures are granted, some countries referred to the design of tax system, i.e., the introduction of tax exemptions or tax credits for specific activities; a few Parties mentioned the application of tariff reductions or duty-free concessions, and subsidized credit. A few Parties referred to payment systems for ecosystem services. The granting of access guarantees for local communities to protected areas, and the establishment of schemes that seek to share receipts from economic activities with them, was also reported by some Parties.

192. As regards the institutional structures and mechanisms by which positive incentives are granted, some Parties referred to environmental funds. One Party reported on the application of auctions for granting stewardship payments.

193. Some countries also reported using non-monetary positive incentive measures. Social recognition through awards and other means featured most prominently (bearing in mind that awards sometimes include a monetary component).

Negative incentive measure

196. References to environmental fees/charges/taxes for environmental-harmful activities (in particular polluting activities, but also compensatory payments for encroachment of nature) featured most prominently among all the comments that referred to disincentives, with many reporting on the application of such measures. A few Parties made reference to the implementation or strengthening of payment systems for the use of natural resources.

Incorporation of biodiversity values into plans, policies and programmes

194. Less than one quarter of reporting countries responded that they have established such mechanisms (28) while more than three quarters indicated that such mechanisms were under development (43) or had not been developed (42).

Biodiversity valuation

195. The application of tools for valuation of biodiversity was the single most important mechanism identified by Parties for the incorporation of market and non-market biodiversity values into relevant plans, policies and programmes and other relevant areas, with 22% of Parties reporting that they were undertaking valuation studies, and a few countries reporting that they were working on the integration of biodiversity values into their system of national accounts. Lack of human and technical capacity in conducting such valuation studies was identified by some Parties as a constraint.

Promotion of markets for biodiversity-based goods and services

196. Around 25% of Parties reported on the promotion of biodiversity-based goods and services, possibly in the context of participatory rural development projects or community-based natural resource management. Several Parties made explicit reference to the sector in which these activities were undertaken – tourism (including ecotourism) was the most prominent sector mentioned. A few Parties mentioned labelling and certification as a means to promote such products.

Other mechanisms for the incorporation of biodiversity values

197. Some Parties made reference to integrated planning, including integrating the valuation of biodiversity into their NBSAPs. A few Parties reported that they use EIA or SEA procedures as a means to ensure the incorporation of biodiversity values. A few Parties mentioned other market mechanisms such as transferable rights or quota. A few countries noted the role of liability and insurance and the polluter-pays-principle.

Removing or mitigating perverse incentives

198. 43% of reporting countries indicated that they made progress, with 41 Parties reporting that relevant policies and practices identified but not entirely removed or mitigated, and 7 Parties reporting that relevant policies and practices were both identified and removed or mitigated. 34 Parties reported that the identification of perverse incentives is under way, and 31 Parties reported no progress.

199. Most Parties reported on the removal or mitigation of perverse incentives in specific sectors. Again, agriculture took the lead, with a number of Parties reporting that perverse incentives, including subsidies, in this sector were identified and removed or mitigated. Agriculture was again closely followed by forestry and fisheries. A few Parties mentioned various measures in the energy sector which were removed because of their detrimental impacts on biodiversity. Two countries reported that they reformulated policies that sought to preserve biodiversity but generated perverse incentives.

200. The same sectors were targeted by Parties that reported on the identification of perverse incentives, with a few more Parties mentioning the importance of land policy, i.e., issues such as land titles, land use zoning, and the system of land taxes, and a few Parties underlining the role of transport infrastructure in particular road construction.

201. A number of Parties also reported on specific means and mechanisms for the identification and removal or mitigation of perverse incentives: Some Parties mentioned the review of the tax system and the application of environmental impact assessment procedures. Organizational measures or reforms, including the establishment of commissions and new authorities, were mentioned by a few Parties. Some Parties referred to regulations and their enhanced enforcement as a means to mitigate perverse incentives. A few Parties underscored the importance of stakeholder involvement, and three member States of the European Union made reference to the application of cross-compliance.

Use of the proposals for the design and implementation of incentive measures

202. Many countries (60%) have not taken into consideration the proposals when designing and implementing incentive measures. 40% of countries said they did. However, most comments provided in response to this question referred back to the activities described under earlier questions, and only some comments made explicit references to the proposals.

203. A few Parties identified specific elements of the proposals that are applied in, and consistent with, national policies and/or NBSAPs. Among those elements, the identification of relevant stakeholders and their involvement featured most prominently. Capacity-building and training, and the provision of technical support, were referred to by a few Parties. Undertaking valuation of biodiversity was mentioned by two Parties. One Party explained that the Ecosystem Approach is applied on a case-by-case basis, and also referred to the identification of underlying threats to biodiversity, and to monitoring and enforcement. Malawi also referred to the identification of perverse incentives and to the development of markets for biodiversity-based goods and services.

Overall assessment of achievements and challenges

204. While some progress could be achieved, considerably more work needs to be undertaken in order to implement Article 11. References to progress made on applying incentive measures in agriculture dominated, followed by forestry. A few Parties referred to progress made in the involvement and participation of stakeholders in designing and implementing incentive measures.

205. The lack of mainstreaming and integration of biodiversity issues into other sectors is identified as the most important challenge in implementing Article 11, closely followed by the lack of financial, human, and technical resources. In addition, some countries also identified needs for enhanced capacity-building and training on biodiversity valuation, as it is associated with the need to enhance awareness of biodiversity values and to better incorporate them into relevant plans, policies and programmes.

*Communication, Education and Public Awareness (Article 13)**Introduction*

206. The programme of work on communication, education and public awareness (CEPA), adopted in decision VI/19, takes its form from Article 13 of the Convention, which requests that Parties promote and encourage understanding of the importance of, and the measures required for, the conservation and sustainable use of biological diversity through the media and through education.

Synthesis of responses and comments

207. More than half of reporting Parties have developed CEPA strategies, however, only 14% have significantly promoted public participation in support of the Convention. A large majority of respondents are undertaking activities to facilitate implementation of the CEPA work programme, to a greater or lesser extent, however, a much smaller number have linked their CEPA strategy to their national biodiversity strategies and action plans.

208. Public awareness of biodiversity has increased in recent years primarily due to collaboration between the ministries of environment and education. Issues related to biodiversity and sustainable development are more regularly integrated into the curricula of primary, secondary and tertiary educational programmes, though often under the umbrella of environmental and/or science programmes.

209. Although an overwhelming majority of governments support integration of biodiversity across all sectors, cross-sectoral implementation has not been extensive. Moreover, the mainstreaming of biodiversity inter-ministerially and throughout all levels of government is uncommon, although a trend towards decentralized environmental management was reported by some Parties.

210. An overwhelming majority of respondents support national, regional and international cooperation. The Mesoamerican Biological Corridor project of Central America is a good example of a regional network serving as a means by which training, scientific and technical cooperation, policy development and capacity for indigenous communities can be strengthened. The Internet provides an efficient mechanism for carrying out outreach and training activities, electronic discussions, and establishing information networks with partner organizations at all levels. Slightly more than half of respondents support national, regional and international activities prioritised by the Global Initiative on Education and Public Awareness.

211. Almost all Parties are promoting communication, education and public awareness of biodiversity at the local level, principally on the themes of conservation and sustainable use, although some countries have also conducted training in genetic resources and benefit-sharing arrangements.

212. Government support for NGOs, press and media organizations has increased significantly. To a lesser degree, public-sector support for private-sector activities, along with the institution of collaborative programmes, particularly with respect to tourism, are taking place. A certain number of Parties have developed plans targeted towards business and industry such as a Green Governance Programme for Corporate Groups (India) and an Industry Sustainability Toolkit (Australia). Tax breaks are sometimes offered to businesses that contribute to green projects.

213. Examples of innovative communication strategies reported by Parties include travelling environmental exhibitions and film festivals, sustainable schools, model farms, eco-model villages that also serve as training centre models, adopt-a-site programmes, environmental songs and jingles, bio-awards and the promotion of the concept of “sustainable societies”. Programmes for the military, physically- and visually-challenged persons, and the elderly, have also been implemented by a few different countries.

Overall assessment of progress and challenges

214. The most noteworthy developments related to this work programme have occurred with respect to NGO and public-sector collaboration, electronic communication, and in the youth sector.

215. A vast majority of Parties has established partnerships with NGOs to implement CEPA activities, with a number of countries providing subsidies and/or training to NGOs and inviting organizations to attend ministerial meetings. Significant activities have also taken place through the establishment and enhancement of CHMs and Internet portals through which scientific databases, thematic encyclopaedia and libraries are linked. CEPA elements are widely integrated into youth programmes through green kindergartens, children’s corners at environmental information centres, eco-clubs and sports programmes. Participation of schoolteachers and children in the German GLOBE and “Nature Detectives” internet-based learning projects has been substantial. Israel has developed an online project entitled “Migrating Birds Know No Boundaries” to benefit the GLOBE project, and Finland is in the process of further developing an internet-based international nature observation network for primary and secondary schools.

216. Further development of formal biodiversity programmes and training materials at the highest academic level is required to mainstream biodiversity into all levels of education. A lack of expert media personnel, science reporters, comprehensive reporting and public participation in decision-making was reported by some Parties. Private-sector engagement in CEPA activities requires substantial improvement.

217. Promotion of biodiversity legislation, the 2010 Target, the Decade of Education for Sustainable Development and the Strategic Plan has not been extensive. Additionally, communication of cross-cutting issues such as economic valuation of biodiversity, trade, incentives, indicators, liability and redress, impact assessment and the Global Strategy for Plant Conservation requires strengthening. Although some developing countries have reported on the participation of women’s groups and unions in various training programmes, advancements are required in this area as well.

218. Cooperation among the national focal points of biodiversity-related conventions and other partners appears to be under-utilized as a means by which best practices and experiences, in regard to implementation of respective CEPA programmes, can be shared. Other obstacles to implementation reported include costs related to the translation of CEPA documentation, high turnover of decision-makers, lack of coordination among decision-makers and stakeholders, and limited financial, technical and human resources.

Access and Benefit-sharing (Article 15)

Introduction

219. The sharing of benefits arising from the use of genetic resources, including access to genetic resources, is one of the three objectives of the Convention. The fourth meeting of the Conference of the Parties decided to establish a panel of experts to develop a common understanding of basic concepts, and to explore all options for access and benefit-sharing. The fifth meeting of the Conference of the Parties decided to establish an Ad Hoc Working Group to develop guidelines and other options for consideration by the sixth meeting. Based on the recommendation of the working group, the sixth meeting adopted the Bonn Guidelines for Access and Benefiting. Following the developments at the World Summit on Sustainable Development in 2002, the seventh meeting of the Conference of the Parties mandated the Working Group to negotiate an international regime on access and benefit-sharing. The seventh meeting also adopted an action plan for capacity-building for access and benefit-sharing.

220. In the third national report, Parties were asked to report on measures to facilitate access and benefit-sharing, the use of the Bonn Guidelines, capacity-building for access and benefit-sharing and national policies that address intellectual property rights (IPRs) in access and benefit-sharing.

Synthesis of responses and comments

221. *Facilitating access to genetic resources for environmentally sound use by other Parties:* Most Parties (76%) indicated that various policies and mechanisms were in place to facilitate access to genetic resources for environmentally sound use by other Parties. Some countries reported that their existing laws, in particular those related to biodiversity, had included provisions governing access to genetic resources within their jurisdiction. Many of these countries required prior informed consent and the signing of the Material Transfer Agreement for access to genetic resources, particularly for commercial use. A few countries reported that they had developed regulations or policies particularly addressing access to genetic resources and benefit-sharing arising from the use of genetic resources. A number of countries said that such a regulation was being drafted. Institutionally, some countries had established national focal points or designated related institutions to handle access to genetic resources and associated benefit-sharing. For example, India had established bodies at various levels to manage access to genetic resources and ensure benefit-sharing arising from the use of genetic resources. Some countries had set up gene banks and developed procedures for exchange of genetic resources with other countries or external institutions. In addition to related CBD provisions, many countries indicated that they had ratified the FAO International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR) and accordingly put policies and mechanisms in place to implement relevant provisions of this treaty. Some countries are reviewing their policies and practices in this regard, and considering some changes to ensure consistency with related international agreements, in particular the CBD and the ITPGR. Some regions, such as ASEAN and Nordic countries, had developed regional frameworks or mechanisms for access to genetic resources and benefit-sharing to ensure that they have common approaches to handle ABS-related issues.

222. Measures to ensure that any scientific research based on genetic resources provided by other Parties is developed and carried out with the full participation of such Parties: A little over half of reporting Parties said that some measures are in place. The rest are considering possible measures or yet to develop such measures. Some countries had developed policies that required scientific research institutions using genetic resources to share benefits through various means with those countries or institutions providing such genetic resources. Those means identified by some countries include joint research, training, scientific and technical cooperation, information exchange, know-how transfer, reintroduction of extinct plants, joint publications, sharing of research results with country of origin and an open international exchange of materials for scientific research and knowledge advancement. The

Swiss Academy of Sciences (SCNAT) has elaborated, with the support of the Federal Office for the Environment (FOEN), guidelines for scientific research entitled "Access and benefit-sharing-good practice for academic research on genetic resources. Some developing countries had adopted policies that required foreign institutions using genetic resources from the country to share benefits from the use of genetic resources with the institutions and/or communities providing such genetic resources or holding the knowledge of use of such genetic resources. A few countries said that they had joined the International Plant Exchange Network (IPEN) where specific terms had been developed for exchange of plant genetic resources. A few countries that had ratified the International Treaty on Plant Genetic Resources for Food and Agriculture are following relevant provisions of this treaty, which they consider are consistent with relevant provisions of the CBD. Some countries reported that such measures had been incorporated in the procedures for prior informed consent and the Material Transfer Agreement, which are key provisions in their ABS-related policies. A few countries said that they were reviewing the approaches or practice of the scientific community in dealing with access to genetic resources and associated benefit-sharing.

223. Measures to ensure that the fair and equitable sharing of the results of research and development and of the benefits arising from the commercial and other use of genetic resources with Contracting Party providing such genetic resources: Some countries (37%) have put in place some measures to this end. A number of countries have put in place comprehensive legislations, policies and administrative measures, meanwhile they indicate that capacity-building is needed for enforcing these legal and policy instruments. 31 countries are considering possible measures and 31 countries are yet to develop such measures. Detailed information provided by Parties is very limited. A few developed countries reported that they had adopted policies that encourage institutions using genetic resources from other countries to share benefits with the country or institution providing such genetic resources. Some of them clearly required that origin of genetic resources must be declared or disclosed in applying patents for those products using genetic resources from these countries. They also organized workshops or campaigns to increase awareness of such requirements and related procedures. A few countries indicated that they are following related provisions in the Bonn Guidelines and the International Treaty on Plant Genetic Resources for Food and Agriculture. In some countries, instead of having a relevant regulation or policy in place, one key means to ensure benefit-sharing is through specific agreements concluded between those institutions involved and the countries providing such genetic resources. Some regions, such as Nordic countries and Andean region, had developed common strategies or approaches for access to genetic resources and benefit-sharing.

224. Consideration of the multilateral system of access and benefit-sharing set out in the ITPGR in developing national measures to address ABS: Less than a half responded positively and more than a half answered negatively. Those that answered yes are mostly Parties to the International Treaty on Plant Genetic Resources and those undergoing a process of ratification. Some of them indicated that the multilateral system set out in the ITPGR had been incorporated or taken into account in developing national regulations and policies for access to genetic resources and benefit-sharing. However, some of these countries that are already Parties to the ITPGR are still reviewing related provisions under the multilateral system to see how they can be incorporated into the national policies and procedures related to ABS. Though not a Party to the ITPGR yet, some countries had developed their ABS policies and instruments with due consideration to the related provisions of the multilateral system set out in the ITPGR.

225. Use of the Bonn Guidelines when developing legislative, administrative or policy measures on access and benefit-sharing and/or when negotiating contracts and other arrangements under the MAT: Only some countries (37%) indicated that the Bonn Guidelines were used or given due consideration when they developed their national legislation, policies or administrative measures on access to genetic resources and benefit-sharing, and broader legislations or policies on biodiversity or the environment. Some countries also reported that the Bonn Guidelines were used or modelled when developing the rules for prior informed consent and the multilateral transfer agreements. A few developed countries that the

Bonn Guidelines were taken into consideration when developing the code of conduct for the private sector or institutions involved in access to genetic resources in other countries. They also organized awareness workshops or campaigns or developed best practice codes or guidelines to this end. The UK provided a few examples where a number of institutions such as Botanical Garden Kew signed agreements with the countries or institutions providing genetic resources, which were consistent with the principles and provisions of the Bonn Guidelines. A few developing countries also mentioned the use of the Bonn Guidelines when they developed laws on bioprospecting or biosafety issues. A number of developing countries identified challenges for the use of the Bonn Guidelines, including the complexity of its provisions that require considerable legal and technical expertise for actual use and implementation.

226. National policies or measures that address of the role of intellectual property rights in access and benefit-sharing arrangements: Only some countries (38%) indicated that their legislations or policies related to access and benefit-sharing had addressed the issues related to the intellectual property rights. For example, some countries like Germany and Sweden clearly required patent applicants to disclose “the country of origin” while patents are applied for those products using genetic resources from other countries. Some countries incorporated such requirements in their patent laws or other related laws, such as plant varieties law, copyright laws and plant breeders laws. Some countries indicated that their relevant laws or policies covered the intellectual property rights but not those issues related to traditional knowledge and practices. Some countries are reviewing the connection between the intellectual property rights and access to genetic resources and considering incorporating IPR-related issues into their legislations or policies governing access to genetic resources and benefit-sharing.

227. *Capacity-building activities related to access and benefit-sharing:* Many developed countries indicated that they had provided support or assistance to developing countries and countries with economies in transition to strengthen their capacities to implement the provisions related to access and benefit-sharing. The following table lists some activities undertaken by some developed countries in this regard.

Country providing support	Country or region receiving support	Projects and/or Activities	Means or channels of support
Australia	APEC countries	Genetic resources management	Workshops etc.
Belgium		ABS-related development aid	Development cooperation channels
Canada	Mexico	A joint Canada-Mexico Workshop on ABS	
Germany	Countries in Asia, Latin America and Africa	Development and implementation of ABS legislation	Development cooperation
The Netherlands	African countries	An Inter-regional meeting between African and European PGRFA networks	International development cooperation
Norway	Developing countries	InBio projects on ABS	International cooperation
Sweden	Developing countries	Advanced International Training Programme “Genetic Resources and IPR-Pathways for Development	International development cooperation
Switzerland	Users and providers of genetic resources and developing countries	The Access and Benefit Management Tool (ABS MT)	Contribution by the State Secretariat for Economic Affairs (SECO)
The United Kingdom	Developing countries	Development of a plain language guide to the CBD and its provisions on ABS; the CBD for Botanists	The UK Darwin Initiative

228. Developing countries also undertook some capacity-building activities. For example, Brazil organized training courses on biopiracy combat. Botswana organized training workshops for local communities on the sustainable use of genetic resources. India hosted a regional training workshop on ABS in relation to bioprospecting. Lebanon organized national workshops to build local capacity and team about potential commercial value and use of biodiversity, and to highlight issues related to access and benefit-sharing and intellectual property rights. A few developing countries indicated that some capacity-building and awareness raising activities were undertaken while drafting national legislations or policies on ABS. A few developing countries also mentioned some collaborative activities with developed countries and relevant international organizations for strengthening capacities in this regard.

Overall Assessment of Progress and Challenges

229. At this stage in the implementation of the access and benefit-sharing provisions of the Convention, many countries focus on awareness-raising activities of relevant stakeholders at the national level and capacity-building activities. A considerable number of countries have begun to develop legal, policy and institutional frameworks for addressing ABS-related issues. Some countries have recognized the importance and the need to put in place some measures that ensure that access to genetic resources should be undertaken through procedures like the prior informed consent and the Multilateral Transfer Agreement. Such measures are already in place in some countries but their capacities for implementing these measures need to be strengthened. The implementation of the Bonn Guidelines is still in the early stage, though some countries have begun to review their related regulations and policies in light of the Guidelines.

230. Obstacles to implementation include:

- limited availability of resources;
- technical capacity constraints;
- administrative burden related to obtaining funding from international bodies considered disproportionate compared to the benefits derived;
- lack of national coordination among national government agencies;
- absence of an adequate national legislative framework;
- low awareness of the issue of access and benefit-sharing at the national level among relevant stakeholders;
- difficulty in monitoring the extent of misappropriation of genetic resources;
- incomplete scientific information and traditional knowledge complexity of the issue has led to difficulty in implementation.

Access to and transfer of technology and technology cooperation (Article 16)

Introduction

231. At its seventh meeting, the Conference of the Parties adopted, in decision VII/29, a programme of work on technology transfer and technological and scientific cooperation, with a view to develop meaningful and effective action to enhance the implementation of Articles 16 to 19 as well as related provisions of the Convention. The programme of work is structured into four programme elements: technology assessments, information systems, creating enabling environments, and capacity-building and enhancement.

232. The guidelines for the third national report contain 9 questions on access to and transfer of technology covering the different provisions of Article 16, the financial and technical support provided for implementation of the programme of work as well as its different elements.

*Synthesis of responses and comments**Measures to provide or facilitate access for and transfer to other Parties of technologies that are relevant to the conservation and sustainable use of biodiversity or make use of genetic resources as well as the provision of support for implementation of the programme of work on technology transfer and cooperation*

233. Slightly less than one half of reporting Parties indicated that they do not have measures in place (37) or that measures are not in place but under review (15). A total of 58 Parties reported that some measures in place, and only 5 Parties reported to have comprehensive measures in place.

234. With regard to the provision of financial and technical support and training to assist in the implementation of the programme of work on transfer of technology and technology cooperation, about two-thirds (65) either replied that they do not have programmes in place (52) or that such programmes are only under development (13). A total of 25 Parties reported having some programmes in place and only two Parties claimed to have comprehensive programmes in place.

235. Most Parties provided concrete case-by-case examples of scientific and technological cooperation, with only a few developing-country Parties providing information on their general regulatory or policy frameworks that provide an enabling environment (some of which were said to not apply specifically to technologies of relevance to the Convention). Brazil provided a detailed reply explaining pertinent laws and regulations. Frequent reference was made to specific activities of research institutions that engage in joint research cooperation programmes, possibly in the context of bilateral and multilateral development cooperation. Cooperation with and through CGIAR Centers and contributions to GEF were explicitly mentioned by a few Parties. Cooperation may involve benefit-sharing arrangements and technology transfer through support in research equipment. Support through capacity-building, including training and research fellowships/scholarships, was frequently referred to by some countries. The importance of providing incentives for technology transfer was mentioned by three Parties, and one Party noted the importance of foreign direct investment and the need for an enabling environment thereon. A few Parties mentioned cooperation on the development of markets for biodiversity-based products, possibly in the context of community-based natural resource management. Assistance in database development and in building national clearing-house mechanisms was mentioned by some Parties.

236. Cooperative research on genetic resources was also frequently mentioned. Technical cooperation in the forestry sector was reported by over 10 Parties, followed by agriculture and fisheries. Technological cooperation in the context of species management and (transboundary) protected areas was referred to by a few Parties, and transboundary water management by one Party. Cooperation on monitoring technologies was also mentioned by one Party.

Measures for countries providing genetic resources to be provided access to and transfer of technology making use of these resources on mutually agreed terms (Article 16 (3))

237. 39% of reporting countries claimed to have some (35) or comprehensive (5) measures in place, while 41 countries indicated that there are no such measures in place and 22 Parties indicated that potential measures are under review. A total of 14 countries indicated that the question does not apply to them.

Measures for the private sector to facilitate access to joint development and transfer of relevant technology for the benefit of government institutions and the private sector of developing countries (Article 16(4))

238. 59% (68) of countries indicated that no such measures were taken (50) or that potential measures are under review (18). A total of 32 countries claimed that some policies and measures are in place, only 2 countries indicated that comprehensive policies and measures are in place, and 13 countries said that the question is not applicable.

239. Only a few countries referred to general policies or measures, including legislation regulating access to genetic resources; investment promotion policy; measures in the context of its national biosafety framework; the establishment of guidelines for public-private partnerships; and cost- or risk-sharing arrangements in order to promote private-sector engagement in developing countries. Concrete examples of public-private partnerships were provided by a few Parties, which may involve funds for the development of the private sector in developing countries .

240. As regards specific sectors, agriculture took the lead, followed by forestry, fisheries management and pharmaceutical research. One Party made specific reference to biofuels, and one Party made reference to the support of the private sector in taxonomic research. General references to the development of markets for biodiversity-based products were made by some Parties.

Programme of Work on transfer of technology and technology cooperation

Measures to remove impediments to multi-country initiatives

241. 80% of reporting countries (88) indicated either that no such measures are in place (62) or that some measures are being considered (28). Only 21 countries claimed that some measures are in place and one country indicated that comprehensive measures are in place.

242. Most comments referred in general terms to the engagement of the Party with multilateral initiatives or organizations that promote research cooperation and technology transfer. A few Member States of the European Union and the European Commission referred to the role of the European Research Framework Programme. A number of Parties reported on the removal of impediments through specific mechanisms or in specific areas. One Party referred to market liberalization in general terms, one Party referred to the respect of conditionality in development cooperation, and one Party referred to the principles enshrined in the Paris Declaration on Aid Effectiveness. A few Parties referred to the use of genetically modified organisms, and one Party, respectively, referred to the following: agreements of biofuels, national parks, land restoration, water basin management, and fisheries management.

Technology assessments addressing technology needs and opportunities (programme element 1, on technology assessments)

243. Almost one half of reporting Parties (53) indicated that no assessments were undertaken, while 31 countries indicated that assessments were under way and 34 countries said that basic assessments were undertaken. No country indicated that comprehensive assessments were undertaken.

244. In providing detailed comments, references were made in particular to the National Capacity Self-assessments for Global Environmental Management and to the national assessments on biotechnology, research and development programmes and capacity-building needs, in the context of the UNEP-GEF project on the development of national biosafety frameworks. A few Parties said that such assessments were conducted in the context of the development of national science and technology policies, and a few Parties referred to assessments being undertaken in the context of development

cooperation projects. Some countries provided more detailed overviews of technology needs, opportunities and constraints.

Assessments and risk analysis of new technologies (programme element 1, on technology assessments)

245. More than one half of reporting countries indicated no such assessments were undertaken (61), while 19 countries indicated that there are assessments under way, 31 countries indicated that some assessments were undertaken and 2 countries indicated that comprehensive assessments were undertaken.

246. Comments mostly referred to risk assessments undertaken prior to the import or release of genetically modified organisms, possibly including socio-economic implications. A few Parties referred to biotechnologies in general and assessments undertaken on control technologies for invasive alien species and forestry technologies.

247. As regards the institutional and procedural setup for undertaking such assessments, some Parties referred to their national biosafety frameworks and regulations, and a few Parties referred to approval procedures more generally. Several Parties referred to assessments being undertaken in the context of development cooperation projects. A few Parties mentioned specialized agencies or inter-agency working groups that are responsible for such assessments. A few Parties underlined that such assessments are undertaken on a case-to-case basis.

Measures to develop or strengthen information systems (programme element 2, on information systems)

248. 71% of reporting Parties do not have programmes in place (43) or have some programmes under development (38). 32 countries have some programmes in place. No Party has comprehensive programmes in place.

249. References were most frequently made to the national clearing-house mechanisms and the Biosafety Clearing-House, and the support of capacity-building activities to strengthen the national CHM/BCH. Other national biodiversity information systems, possibly supported by webpages, were mentioned by some Parties. Electronic networks for scientific and technological cooperation were mentioned by several Parties. References were made to information systems under development with a specific thematic focus. For instance, references were made to: a geographical information system for marine biodiversity; an information system on the wild relatives of crops, an agrobiodiversity database, a database on technological information in patent documentation, and a database on technology transfer activities in development cooperation. One Party mentioned the importance of improving national electronic communication infrastructure.

Development and implementation of national frameworks for cooperation and access to technologies (programme element 3, on enabling environments)

250. 73% of reporting countries (80) reported that no measures were taken (56) or that no measures were taken but a few measures were being considered. Slightly more than one quarter (30) said that some measures were taken and no Party said that many measures were taken.

251. Many comments reaffirmed information provided under earlier questions. Most Parties referred to the preparation of national biosafety frameworks and legislation and to the inclusion of technology transfer and technological cooperation in national biodiversity policies. A number of Parties referred to the establishment or designation of national institutions responsible for technology transfer and adaptation, and to their involvement in international scientific and technological cooperation. Some Parties also made references to other policies and plans, such as national science and technology policies, national action plans for combating desertification, poverty reduction strategy papers, as well as to

national legislation on access to genetic resources, intellectual property legislation, and legislation on trade in dangerous goods and technologies of strategic significance. Some Parties also underlined that, while measures were undertaken, this had not been done in an explicit biodiversity context.

Overall assessment of achievements and challenges

252. Overall progress is very limited in implementation of both Article 16 and the programme of work on technology transfer and cooperation. However, some Parties noted some positive outcomes of the activities undertaken, including: increased knowledge and expertise; additional funding provided; access to new technology facilitated; and reduced adverse impact on biodiversity. Several Parties also pointed to specific examples of good practice cases and successful activities in technology transfer and scientific and technological cooperation.

253. Major constraints identified include mostly the lack of human capacity and financial resources. Institutional weaknesses including the absence of legislation were mentioned by a number of Parties, some of them making explicit reference to the absence of biosafety legislation as well as legislation on access to genetic resources. The lack of capacity for the adaptation of technology was also mentioned. Some Parties also noted a lack of information and knowledge, in particular with respect to technology needs, to available technologies, and with regard to technology assessments.

254. A number of developing-country Parties mentioned the low level of technology transfer from developed countries and of international technological cooperation, underlining the need for developed-country Parties to adjust their technology transfer policies so that technologies for conservation and sustainable use of biodiversity are transferred in a preferential manner instead of a commercial manner, and noting the “embryonic nature” of the mechanism on access to and transfer of technology under the Convention. Patents and the prohibitive level of fees were identified as a barrier for effective transfer of modern technologies to developing countries.

Scientific and Technical Cooperation (Articles 12, 17 & 18)

Article 12 - Research and Training

Introduction

255. Article 12 has not yet been addressed as a separate agenda item by the Conference of the Parties however elements of this article are often integrated into decisions and work programmes adopted by Parties.

Synthesis of responses and comments

Establishment of programmes for scientific and technical education and training in measures for the identification, conservation and sustainable use of biological diversity and its components

256. Responses reveal that most (72%) Parties have established programmes for scientific and technical education and training in measures for the identification, conservation and sustainable use of biological diversity and its components; some (21%) Parties have programmes under development; and a few (7%) Parties have established no programmes.

257. The higher learning institutions of nearly all countries offer courses related to the scientific work programmes of the Convention. Extensive undergraduate and graduate programmes are also offered by a considerable number of countries. Particular developments in this regard include the establishment of an international doctoral school of biodiversity sciences in Denmark, through the cooperation of 13 Danish institutions, and a doctoral school on ecology and biodiversity established in Estonia with the support of

European Union structural funds. Most countries also offer training, particularly in regard to biodiversity management, through ministries, educational institutions, training conservatories, research agencies, NGOs and UN agencies (e.g., IUCN, UNDP). Participants in training programmes generally comprise students, researchers, environmental trainers and managers.

258. In addition to having a strong environmental network comprised of several government and non-governmental organizations, India has also set up nine centres of excellences in different parts of the country to further strengthen awareness and research and training in prioritised areas of science and management. Training programmes have been developed for various groups, including young children, general public, farmers, entrepreneurs, on issues related to conservation, cultivation and processing of medicinal and aromatic plants, agro technologies and intellectual property rights.

Promoting and encouraging research which contributes to the conservation and sustainable use of biological diversity

259. Nearly all (94%) countries are promoting and encouraging research which contributes to the conservation and sustainable use of biological diversity. Very few (4%) countries are not promoting and encouraging research. Due to the fact that the number of biodiversity research projects being undertaken by Parties is too broad to cover in this analysis, a few examples of successful research outcomes are highlighted below.

260. Research on a captive breeding program in Saint Lucia for the Saint Lucia Parrot (*Amazona versicolor*) contributed to the survival of the species. Vietnam has fully inventoried biodiversity in national parks and nature reserves, central highlands, north central and northwest regions of the country, as well as in several provinces. This research has resulted in the discovery of six new mammal species, along with the identification of a population of the Hairy-nosed Otter (*Lutra sumatrana*) in U Minh Thuong National Park previously believed to be extinct. In Israel, research conducted on the biota of the "Evolution Canyon" on Mount Carmel produced publications on many taxa of terrestrial invertebrates, including insects, that had not been studied in Israel before.

261. Through Brazilian genomic research begun in 1997 and the establishment of a virtual research institute connecting laboratories to research institutions of São Paulo state, the genetic material of the bacterium *Xylella fastidiosa*, which causes citrus variegated chlorosis (CVC), was deciphered. This outcome resulted in Brazil making history by conducting the first genetic sequencing of a phytopathogen (an organism responsible for causing disease in plants of economic importance).

Promoting and cooperating in the use of scientific advances in biological diversity research in developing methods for conservation and sustainable use of biological resources

262. Most (86%) Parties are promoting and cooperating in the use of scientific advances in biological diversity in developing methods of conservation and sustainable use of biological resources; few (14%) Parties are not promoting and cooperating in such activities. Various forms of partnerships exist at national, regional and international levels. Partners typically include federal ministries, universities, researchers, NGOs and UN organizations. Few countries are engaging the private sector in projects. Again, due to the vast number of projects being undertaken in this regard, this analysis will highlight a few examples only.

263. In India, a project on the conservation and sustainable use of medicinal plants has brought together the forest departments of 5 states, 18 NGOs and 5 research organizations. In Morocco, the National Institute for Medicinal and Aromatic Plants and a supporting national network have been created to reinforce research and development in the protection and value of medicinal and aromatic plants.

264. The European Platform for Biodiversity Research Strategy (EPBRS) is supported by the European Community and aims to identify and promote research that will contribute to policies, and the management and sustainable use of biodiversity components. MARINE GENOMICS EUROPE, a network of excellence funded by the European Community, assembles 450 scientists from 44 institutions in 16 countries to promote, develop and communicate, throughout the European Union, a broader understanding of questions related to marine ecosystems, including the establishment of databases of marine resources.

265. Research related to the development of mechanisms for fair benefit-sharing for local populations is supported by Germany. Examples include projects on the protection of wild coffee habitats in Ethiopia, and on nature conservation in Chile, Ecuador and Brazil. Research funded through Canada's International Development Research Centre (IDRC) for the Sustainable Use of Biodiversity Program Initiative aims to develop appropriate technologies, local institutions, and policy frameworks through interdisciplinary and participatory research that incorporates local and indigenous knowledge, as well as gender considerations. The Initiative has funded community-based research in sub-Saharan Africa, Asia, Latin America & the Caribbean, the Middle East and North Africa that has the potential to affect national and international policies.

Overall assessment of progress and challenges

266. At present, research and training activities primarily comprise activities related to taxonomy and biodiversity management. Consequently, there is a need to promote an interdisciplinary approach to research and training among Parties to advance holistic implementation of the Convention (particularly as concerns legal and socio-economic dimensions) to effectively mainstream biodiversity across sectors. There is also a need to increase the participation of particular groups, such as indigenous and local communities, women's groups, general public, media and the private sector in education and training programmes.

267. This analysis illustrates that, in general, the links between the research community and implementing agencies, organizations, companies, general public and other stakeholders require considerable strengthening. Also evident is the need to bridge the theoretical achievements of research with their practical application; to develop a systematic approach to conducting research with modern research methods for biodiversity conservation; to revise programmes offered by educational institutions.

268. Constraints reported by Parties to implement this article include: lack of synergies, cooperation, sustainable coordination mechanisms; inadequate infrastructure, teaching and research materials; lack of official verification and certification procedures; lack of training in the use of modern technologies; insufficient number of research personnel; insufficient capacity to undertake monitoring and long-term projects; lack of interdisciplinary research; inconsistent research methodologies.

Article 17 - Exchange of Information

Introduction

269. So far the Conference of the Parties has not provided specific guidance on the implementation of this Article. In the third national report, all Parties were asked to report on measures to facilitate information exchange, and developed countries on whether they had taken into consideration the special needs of developing countries in facilitating information exchange.

*Synthesis of responses and comments**Measures to facilitate the exchange of information*

270. Many Parties (63%) have put some measures in place to facilitate information exchange while a number of countries (17) have taken comprehensive measures. Ten countries indicated that they had no such measures in place and nine countries are looking at possible measures.

271. Two-thirds of developed countries indicate that they had taken into account the special needs of developing countries while facilitating information exchange, with some saying that the information they exchange with developing countries does not necessarily cover all the categories of information specified in Article 17(2).

272. Some countries have established national databases or information networks of biodiversity and/or biodiversity-related information. For example, Belgium has established the Belgian Biodiversity Platform. Canada has set up the Federal Biodiversity Information Partnership, Canadian Information System for the Environment and NatureServe's Conservation Data Centers. Ethiopia is developing an Environmental Information System. Some regions have also developed networks of biodiversity information such as the European Network for Biodiversity Information (ENBI), the Inter-American Biodiversity Information Network (IABIN), and the African Environmental Information Network (AEIN). Many countries have established databases for their taxonomic or museum collections such as Australia's Virtual Herbarium and China's biodiversity database.

Overall assessment of progress and challenges

273. There has been some obvious progress in the exchange of information since the adoption of the Convention. Although the types of measures undertaken by countries to facilitate the exchange of information vary, nearly all countries have undertaken measures in this regard. Several developed countries have established full-fledged national networks. Many countries are also participating in international biodiversity information networks, such the Global Biodiversity Information Facility (GBIF). In addition, there are numerous information networks specialized in specific areas related to the Convention. Even if it is difficult at this stage to accurately assess how useful and effective each of these measures or initiatives has been for researchers, decision-makers and the general public, the amount of information available and related networks have generated considerable impacts worldwide. The decrease in obstacles such as technological barriers has greatly contributed to the improvement in the capacity of many countries to access and exchange information.

274. Main constraints identified by many countries for implementing this Article are:

- Lack of capacity;
- Lack of financial, human and technical resources;
- Lack of national information management standards and shortage of relevant information on biodiversity.

Article 18 - Technical and Scientific Cooperation*Introduction*

275. Scientific and technical cooperation, including the Clearing-House Mechanism (CHM) and related capacity-building, has been referred to in many of the decisions of the Conference of the Parties. The Strategic Plan adopted at the sixth meeting of the Conference of the Parties identified improved financial, human, scientific, technical and technological capacity to implement the Convention as one of

its goals and objectives to be met by 2010. The eighth meeting of the Conference of the Parties, in its decision VIII/11, adopted an updated strategy and a programme of work for the CHM until 2010.

276. In the third national report, Parties were asked to report on measures to promote scientific and technical cooperation, efforts to promote development of joint programmes and ventures for technology development, establishing links with NGOs, the private sector and research institutions working in this field and development and use of CHM.

Synthesis of responses and comments

Measures to promote international technical and scientific cooperation in the field of conservation and sustainable use of biological diversity

277. Nearly all countries are involved in international technical and scientific cooperation in the field of conservation and sustainable use of biodiversity. The main players are United Nations institutions (e.g. GEF, UNEP, UNDP, UNESCO, FAO), large international NGOs specialized in biodiversity (e.g. IUCN, WWF, BirdLife), Regional Organizations (e.g. European Commission, ASEAN), and bilateral cooperation agencies from developed countries (e.g. German GTZ, Canadian CIDA, Swedish SIDA).

278. International cooperation is also promoted through multilateral agreements and initiatives which typically focus on a particular thematic area (e.g. Ramsar, CITES, CGIAR on agriculture, CIFOR on forests), and through regional or national networks (e.g. American IABIN, Asian ASEAN, European Eionet, African AEIN Commonwealth CSIRO, Canadian CBIN, Belgian ABIC)

Encouraging and developing methods of cooperation for the development and use of technologies, including indigenous and traditional technologies, in pursuance of the objectives of this Convention

279. The answers are split equally among 3 groups, with 37 countries having methods in place, 39 with relevant methods under development, and the remaining 39 without any methods developed in this regard.

Promoting the establishment of joint research programmes and joint ventures for the development of technologies relevant to the objectives of the Convention

283. 86 countries have been active in the establishment of joint research programmes and ventures for the development of technologies. Examples provided highlight that most of these programmes have been initiated through international, regional, bilateral and international non-governmental organizations mentioned above.

Establishing links to non-governmental organizations, private sector and other institutions holding important databases or undertaking significant work on biological diversity through the CHM

280. 58 countries have established links with partner organizations through their CHM, as requested by Decision V/14. Among those countries who have yet to do so, 34 are in the process of coordinating with relevant partners. Overall, this process can be considered as an ongoing activity for each national CHM.

Further development of the CHM to assist developing countries and countries with economies in transition to gain access to information in the field of scientific and technical cooperation

281. Although this question was addressed to developed countries only, and fewer than 10 substantive comments were provided, they are nonetheless very informative. Unfortunately, they reveal that only a handful of national CHMs from developed countries are effectively assisting other countries to gain access to information in the field of scientific and technical cooperation, though most of the developed countries are very active in international cooperation.

Use of the CHM to make information available more useful for researchers and decision-makers

282. 48 countries have taken measures to make relevant information available to researchers and decision-makers through their national CHM. On the other hand, 21 countries report that nothing has been undertaken in this regard. 43 countries are looking at relevant initiatives.

283. Most of the comments describe the type of information available on the national CHM, and confirm that the CHM is a useful tool for researchers and decision-makers. Approximately 10 countries provide further details about their national information networks.

Development, provision and sharing services and tools to enhance and facilitate the implementation of the CHM and further improve synergies among biodiversity-related Conventions

284. 71 countries report that no services and tools have been developed, whereas 38 countries report that tools and services have been provided. At least 10 countries refer to their national CHM website as the on-line service through which information is shared. To date, the main tool developed in this regard is the European Portal Toolkit which is being used by most European national CHMs as well as by almost 20 African countries. Approximately 10 countries mentioned initiatives specifically targeted towards improving synergies among biodiversity-related conventions, mainly through national coordination mechanisms.

Overall assessment of progress and challenges

285. Although the scope of the third national report cannot provide an exhaustive list of all cooperation initiatives related to implementation of the Convention, it is clear that some progress has been made in the field of international technical and scientific cooperation.

286. International organizations specialized in cooperation have been playing a major role. These organizations include not only United Nations system institutions (e.g. GEF, UNEP, UNDP, UNESCO, FAO) but also large international NGOs (e.g. IUCN, WWF) and regional institutions. Bilateral cooperation agencies should also be credited for their efforts.

287. Overall, it is not clear to what extent these international cooperation initiatives have been facilitated by the Clearing-House Mechanism. Many factors, such as national strategies and global awareness about the Convention, have to be taken into account. Another difficulty in assessing impact relates to the fact that the Secretariat receives very limited feedback on implementation. Such feedback would be extremely valuable, particularly if a link could be drawn between decisions and implementation.

288. Main obstacles identified by many countries for implementing this Article include:

- Lack of a strong commitment to establishing a national CHM;
- Lack of financial, human and technical support to establish and operate a national CHM;
- Management on a permanent basis of a national biodiversity network;

- Sustainability and limited capacity that affects further development,
- Lack of financial, human and technical resources for undertaking scientific and technical cooperation.

Financial resources (Article 20)

Introduction

289. Article 20 of the Convention requires all Parties to provide financial support and incentives for the implementation of the Convention. Developed countries are also required to provide new and additional financial resources to enable developing countries to meet the agreed full incremental costs of implementing measures which fulfill the obligations under the Convention. The Conference of the Parties provided guidance in its various decisions on financial resources.

290. In the third national report, countries were asked to report on financial resources provided or received to implement the Convention, major financing programmes, incentives, measures to encourage financial support, actions to integrate biodiversity into national and international development initiatives and plans as well as sectoral development programmes. Developed countries were asked to report on the provision of new and additional financial resources to developing countries. The synthesis below is organized by the key information provided, rather than by questions and requests. No overall assessments are made here. Further information can be found in other WGRI documents related to financial resources.

Synthesis of responses and comments

Bilateral resources

291. Bilateral assistance agencies are principal delivery mechanisms for providing resources through bilateral channels, and many governmental organizations, including Ministries of Environment, are also involved in providing a significant amount of aid. Small donor countries, despite limited capacity, can play a significant role in supporting particular themes of the Convention. Biodiversity capacity of donor agencies has increased, for instance, through the establishment of the EC Environmental Help-Desk and training programme.

292. It is common practice to integrate environmental considerations into all aspects of development cooperation, in particular by applying environmental impact assessments. New biodiversity-related development assistance programmes have emerged in line with the rapid evolution of geographical and thematic focus of aid policies. Biodiversity-targeted assistance programmes continue to play a valuable role in shaping international financial cooperation for biodiversity. Funding targets/estimates are specified in some donor countries. Biodiversity is featured in new policy documents.

Regional and multilateral resources

293. Bilateral agencies can be instrumental in fostering regional financial cooperation for biodiversity. GEF funding through UNDP and UNEP can play a leading role in promoting regional biodiversity cooperation. Regional organizations demonstrate potential for regional resources. Regional roundtables serve as a useful process for facilitating regional resources. The European Union's various regional financial instruments are perhaps the most successful by far among all regional resources.

294. Regional resources are frequently channelled through regional and global projects, rather than through the established regional organizations. Most regional programmes draw upon funds from bilateral and multilateral agencies. The total financial resources realized through regional channels can be estimated. International non-governmental organizations in the region and regional agreements

provide technical assistance. Emerging proposals include an Arab Environment Facility (AEF) to secure funds for environmental projects in the Arab region, and a Gulf Environmental Fund that will help to finance conservation in all the Gulf States.

295. The GEF is considered by many donor countries as the primary vehicle for funding global biodiversity conservation under the Convention. However, other international organizations are also involved in channelling financial resources to biodiversity, in particular through new initiatives or trust funds. Developing countries confirmed that the GEF has been the main source of financing biodiversity projects. Some developing countries proposed aid programs and organized donor conferences.

National budgets

296. Only 11 percent of countries indicated that they did not provide any financial support or incentives to national activities that are intended to achieve the objectives of the Convention. The large majority of countries have provided financial support or incentives or both to support national biodiversity activities. Public investment in environmental protection and mitigation has decreased in some countries and increased in other countries. Budgetary cuts are a serious problem for biodiversity conservation and sustainable use.

297. Overall funding estimates are often made on national expenses in the fields of forestry, nature conservation and protected areas, fisheries, agriculture, agro-environment, tourism, natural resources, education and science, industry, trade, regional development and public works, energy, oceans, transport, urban development, water, mining, botanical gardens and herbarium, health, national defence. National expenses are sometimes distributed through special programs, rather than through traditional administrative lines. Provincial and local governments have considerable annual budgets allocated to nature conservation.

298. Although funding required for biodiversity is comparatively small as compared to the funds planned for other environmental components, biodiversity activities are generally under-funded. Environmental funds provide a funding umbrella for financing biodiversity activities and projects. Set-aside funds can ensure conservation in perpetuity. Several countries have developed national biodiversity work programmes and a national GEF strategy, and introduced a sector-wide approach (Environment and Natural Resources sector). Budgeting methods in respect of biodiversity require strengthening since budgetary procedures are not suited for assessing intangible costs. National public-sector reform can have impacts on biodiversity financing since biodiversity issues are normally processed at decentralized levels. Oil prices have impacts on overall governmental expenditures, thus on biodiversity expenditures. The dependence on external sources will decrease significantly with the establishment of sustainable financing mechanisms.

Tax measures

299. Slightly more than half of the reporting countries indicated that no tax exemptions were available for biodiversity-related donations. 39 reporting countries have adopted tax exemption status for biodiversity-related donations, and 15 reporting countries are developing appropriate tax exemption measures.

Other resources

300. There are many examples of private contributions and resources generated from revenue measures, but the resultant resources are generally insignificant at national or international levels. Several countries have begun to introduce innovative financial mechanisms such as payments for

ecosystem services, however, their potential to generate sustainable finances has not been significantly realized to date.

Utilization of resources

301. 16 donor countries identified major areas of financial support, with the most common areas of support being related to *in-situ* conservation, *ex-situ* conservation, protected areas and agricultural biodiversity. The areas supported by fewer countries are preparation of the first report on the State of the World's Animal Genetic Resources, Global Taxonomy Initiative, development of national indicators, and the Global Strategy for Plant Conservation.

302. This distribution of donor support among various issues is echoed by attempts made by developing countries to secure finances. *In-situ* conservation is the most common area for which developing countries have tried to secure resources. The areas for which fewer funding requests have been made by developing countries include the Global Taxonomy Initiative, implementation of the Addis Ababa Principles and the Guidelines for the Sustainable Use of Biodiversity, and development of national strategies or action plans to deal with alien species.

303. 31 countries indicated that they had monitoring systems in place, and 32 additional countries indicated that they were in the process of establishing procedures for monitoring financial support. Over 70 percent of countries still do not have a process to monitor financial support in their countries. Similarly, only one-fifth of reporting countries have ever conducted a review of their national budgets including official development assistance in support of national biodiversity activities.

Cooperation (Article 5)

Introduction

304. Article 5 of the Convention requires all countries to cooperate to implement the Convention, in particular when addressing transboundary threats to biodiversity. Guidance provided by the Conference of the Parties on this Article to date is primarily related to cooperation with relevant international organizations and initiatives at various levels. Relevant guidance can be also found in many decisions of the Conference of the Parties.

305. In the third national report, Parties were asked to report on transboundary cooperation, establishment of regional and subregional mechanisms for cooperation and harmonization of national policies and programmes with a view to increasing synergies among related conventions.

Synthesis of responses and comments

306. Nearly all Parties are participating in different forms of international cooperation. Most countries reported that the highest degree of cooperation was being undertaken at the regional and subregional levels. Moreover, some countries reported that existing regional mechanisms and networks had been strengthened through the development of regional action plans, green corridors, regional CHMs, common internet portals and databases. Multilateral cooperation is also being conducted by a clear majority of countries on a wide range of themes. The degree of bilateral cooperation is the lowest however still carried out by the majority. Apart from ministries and government departments, international partners also include universities, research centres, UN organizations and non-governmental organizations.

307. It is apparent that international cooperation is serving to facilitate the implementation of the Convention at all levels through financial, technical and technological support, information-sharing,

capacity-building for training and research, development of projects on thematic programmes and cross-cutting issues, and sectoral plans.

308. Examples of cooperation initiatives include: (i) Austrian-led cooperation with countries in eastern Europe, Central and West Asia, North Africa, Sub-Saharan Africa, Asia Pacific and Latin America on the development of training capacity and human resources for forest biodiversity management; (ii) Belgian-led cooperation with 21 countries and 3 subregional networks on, among other issues, capacity-building for CHM and BCH focal points; (iii) EC donor support for the legal establishment of an ASEAN Biodiversity Centre, within ASEAN, with a view to promoting cooperation on environmental and biodiversity matters; (iv) SAFRINET, a southern African network of BioNET International established to build taxonomic capacity in the Southern African Development Community; (v) NOBANIS, a network of Nordic/Baltic countries, supported by integrated databases and a common internet portal, created to address alien invasive species; (vi) IABIN, the Inter-American Biodiversity Information Network; (vii) Arctic Council (all member states are CBD Parties with the exception of one) programmes to develop issues related to the conservation of Arctic Flora and Fauna (CAFF).

309. 20 Parties are taking comprehensive steps to harmonize national policies and programmes to implement various multilateral environment agreements and relevant regional initiatives at the national level. 74% report that some steps are being taken in this regard. In regard to the harmonization of policies among the three Rio Conventions, several Parties commented that the synergies identified by the GEF National Capacity Self-Assessment have assisted in guiding the development of harmonized policies and programmes. However, only a few countries (e.g. Ghana and Uganda) report having harmonized policies among these three conventions. A certain amount of progress has been made by European countries to integrate the 2010 target goals into national plans through alignment with related legislation of the European Community. It is common for targets to be met indirectly through other policy frameworks. Little progress has been made regarding the harmonization of national policies with the Millennium Development Goals and Poverty Reduction Strategies, and even less with respect to the rules of the World Trade Organization.

Overall assessment of progress and challenges

310. This analysis highlights the fact that, although the establishment and strengthening of cooperation agreements signify positive developments, their impact as relates to the achievement of the 2010 target goals and objectives of the Convention is at present difficult to assess.

311. Cooperation with the private sector is negligible and deserves attention. Attention should also be given to increasing the level of involvement of women's groups, general public, local and indigenous communities in cooperation initiatives. Although a few Parties reported on the promotion of the relationship between biodiversity conservation and socio-economic development at the national and regional levels, the degree of participation of non-environmental sectors in cooperation agreements is far from being satisfactory to implement the Convention.

312. Other obstacles to implementation of Article 5 include the assignment of improper mandates at the level of implementation; insufficient capacity to identify appropriate indicators to monitor progress on the implementation of 2010 Target and Millennium Development Goals; weak administrative frameworks to support harmonization of policies; dependence on cooperation trends of foreign policies without due regard to real national needs; lack of ecosystem management and coordination between national protection systems in respect of transboundary nature systems; political instability; linguistic and cultural barriers; lack of economic incentives.